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ABSTRACT

A conference on the improvement of teaching in higher education reached the conclusion that colleges and universities need the help of a larger community than that of their own institutional settings. Professional associations, foundations, and the federal government share the responsibility for initiation of both research and development efforts. Conference papers address the following topics: a university perspective, a foundation perspective, improving teaching in America, graduate education in transition, private enterprise and educational change, professional associations and college teaching, planning an evolution vs. experience and controls, leadership, and factors affecting instruction in higher education. Participants included Robert H. Strotz, Raymond W. Mack, B. Claude Mathis, Russell Mawby, Robert E. Kinsinger, Kenneth Ehle, Ann M. Heiss, Francis Keppel, John A.D. Cooper, Peter P. Muirhead, Fred M. Hechinger, and Steven Holbrook. Comments on the papers and a conclusion and summary of discussions are presented. (SW)

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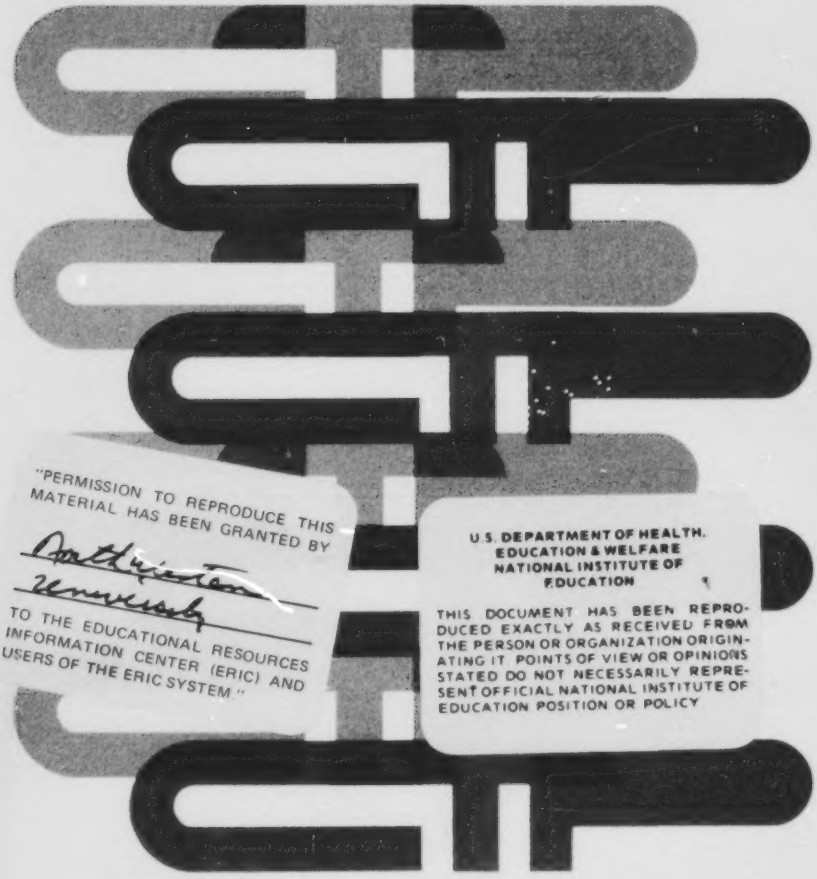
TEACHING: A FORCE FOR CHANGE IN HIGHER EDUCATION

Edited by B. Claude Mathis and Steven T. Holbrook



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Northwestern University/The Center for the Teaching Professions

TEACHING:

A FORCE FOR CHANGE IN HIGHER EDUCATION

Edited by

B. Claude Mathis
and
Steven T. Holbrook
Assisted by Carola N. Minar

Report from

INVITATIONAL CONFERENCE
THE IMPROVEMENT OF TEACHING IN HIGHER EDUCATION
November 16-18, 1972

The Center for the Teaching Professions
Northwestern University

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INTRODUCTION

In November, 1972, a conference was held at Northwestern University under the joint sponsorship of Northwestern's Center for the Teaching Professions and the W. K. Kellogg Foundation. The purpose of the Conference was to examine the issues and problems concerning the quality of teaching in higher education and the need for excellence at that level. The individuals invited to participate in the three days of discussion represent a wide range of interest and knowledge about colleges and universities and thus contributed a range of viewpoints to the discussion. The contributions of Professor Eble, Dr. Heiss, Mr. Keppel, Dr. Cooper, and Dr. Muirhead were written prior to the Conference and were presented to the participants for their reactions. Dr. Holbrook's paper is a summary of much of the discussion and commentary concerning the issues and problems identified by the papers. The remarks of President Strotz, Dean Mack, and Dr. Mathis place the Conference in perspective relative to the concerns of Northwestern University and teaching as a central effort in its educational mission. The papers of Dr. Mawby and Dr. Kinsinger clearly delineate the responsibilities of foundations in helping to improve the quality of higher education, both nationally and internationally. The comments following many of the papers represent editorial summaries of discussions by participants concerning issues brought out in the papers.

The Conference dealt with the issue of teaching in higher education by identifying and examining some of the problems associated with its improvement. Though no attempt was made to find solutions in so short a time, a basic conclusion reached was that colleges and universities need the help of a larger community than that of their own institutional settings in order to develop the efforts needed for improvement in the quality of teaching. Professional associations, foundations, and the federal government share the responsibility of initiation of both research and development efforts for elevating teaching to the level its importance demands.

The contents of this volume are dedicated to efforts to improve teaching in higher education.

B. Claude Mathis
Steven T. Holbrook
Editors

I. A UNIVERSITY PERSPECTIVE

Institutional commitment is a critical factor in assuring the success of instructional improvement efforts. Northwestern University, based upon an historical precedent of concern for instruction, interdisciplinary involvement, and faculty cooperation, is committed to innovative instructional programs. In 1969, in support of this commitment, Northwestern established The Center for the Teaching Professions, with the generous support of the W. K. Kellogg Foundation. A major factor in the Foundation's decision to fund an all-university center designed to focus on teaching was Northwestern's dedication to improving instruction.

The Center for the Teaching Professions was established at a time when throughout the University general concern for the improvement of teaching and learning had become a subject of frequent discussion among students, faculty, and administrators. In 1968 and 1969, two volumes of the report of a faculty planning committee, A Community of Scholars, emphasized the need for excellence in teaching at Northwestern University and recommended a more daring and experimental approach to the development of curricula reforms. One of the many results of this report was the creation of a Committee on Curriculum and Teaching of the University Senate.

A recent statement from the administration of the University which emphasizes the importance of teaching and scholarship for the Northwestern community states:

> *The central goal of Northwestern University is to promote excellence in scholarship, and to conserve and disseminate the fruits of that scholarship. We therefore strive constantly to improve the quality of the interaction between teaching and learning, between the transmission of accumulated wisdom and the discovery of new knowledge. Teaching and research should inform and sustain each other. Effective teaching presents in a well organized manner the structure of what we currently know, and thus pinpoints gaps in our systems of knowledge and guides our research efforts. Effective teaching also develops techniques of scientific inquiry and rational discourse. Sound research adds to our fund of knowledge, and thus contributes to stimulating teaching.*

A. NORTHWESTERN UNIVERSITY

*Dr. Robert H. Strotz**

"How are things different; how are they the same," is a paraphrased quote from one of the popular Sesame Street books. It is an excellent way to put current educational developments in perspective. Education is a dynamic process continually evolving new and more advanced concepts from existing knowledge and continually seeking to prepare students for everchanging roles in a constantly changing society. As a result of many technological innovations – the proliferation of books, the advent of the computer, the mobility provided by the automobile, and television's growing audience – today's young people are brighter, quicker, better prepared to absorb more at a faster rate than ever before.

During the past 40 years, colleges and universities have accelerated their pace also at a rate faster than ever before. This degree of acceleration was predicted years ago by Henry Adams when he put forth his dynamic theory of history observing that change which once would have required 100 years is now accomplished in ten, and change that used to take ten years now takes only one year. Where we go from here is determined by us. Will we be pushed, or will we pull? Will educators be merely responsive, or will we take the lead?

Northwestern's positive response to this question is its Center for the Teaching Professions. It is clear that we have every intention of continuing our leadership role. That is really what the Center is all about.

The specific objectives of The Center for the Teaching Professions were designed within a context of academic excellence to provide both in-service and pre-service support to the development of effective strategies for creative teaching, to help other educational institutions and professional organizations improve their teaching programs, and to serve as a model for similar centers at other universities. Other colleges and universities are in fact responding to Northwestern's model center. In the near future, Stanford, the University of California at Santa Barbara, and the Ontario Institute for Education will experiment with similar designs.

Specifically designed to concentrate its efforts during the first three years on the improvement of instructional techniques within Northwestern, the Center is serving as a university-wide resource providing support and expertise to faculty members in many schools and departments, making it the multi-

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*Robert H. Strotz is President of Northwestern University, where he has also served many years as Professor of Economics and Dean of the College of Arts and Sciences. He was editor of the journal *Econometrica* from 1953-68, and has contributed widely to other professional journals.

disciplinary effort it was intended to be. Further, the Center demonstrates clearly that at Northwestern teaching and research are not viewed as separate entities, but as activities that complement each other.

Over the years Northwestern has sought to maintain an academic image for the innovative approach embodied in the Center. It visibly demonstrates the burgeoning awareness in academic circles of the need to rethink existing techniques and to find strong new approaches to teaching and learning. At times the learning process becomes burdened by outmoded procedures or atrophied approaches toward a particular discipline, procedures that have become so pedantic and unimaginative as to inhibit both the teachers and the taught. It is the responsibility of all of us charged with the future development of higher education to prevent these outmoded procedures from happening.

B. CHANGE AND THE REVOLUTION IN TEACHING

*Dr. Raymond W. Mack**

I would like to welcome you to our conference on The Improvement of Teaching in Higher Education. Let us direct our attention to three problems for which I have no solutions, but which I believe we should keep in mind during our discussions.

The first that occurred to me was a basic social science premise, one we are supposed to know about but spend very little time addressing: change is very hard on people. Any normal human being who is not committed to a new concept or idea is invariably opposed to it, simply because it is change. We have many good words we use to imply that our change is a good change, such as progress; but unless people are persuaded that the change is clearly more rewarding for them, or less punishing, simple learning theory explains their natural reaction to be against it.

In other words, each of us has spent all of his life until now learning to live within the structure of things as he perceives it. Should someone propose we alter this structure or take on some basic premise of the culture and attempt to persuade us that we no longer believe it, he is asking us to trade in all those years spent learning to get along with the way it is.

We ought to try to understand why our fellow citizens get so impatient with people such as the participants in this symposium on improving teaching in America, the kind of people who say, "We have a good new idea about how to revamp the structure and all you have to do is learn to operate a new way for it to be far more rewarding than it is now." Instead, we need to remember that there must be persuasive evidence that the change is rewarding, and not be surprised if acceptance is still slow.

Technological change is one thing; it is visibly rewarding. Anyone who has every day carried a heavy cake of ice, put it in an icebox, and taken the heavy tub of dirty water from under the icebox and carried it outside is not hard to sell on electric refrigeration. But it takes considerably more persuasive marshalling of the evidence if you tell people that the strangers they have been taught all their lives to suspect and fear are now the people they are supposed to live next door to, go to school with, and make considerable effort to get across town to be with. It may be evident to some of us on the basis of economic data, political data, sociological data or theological theory that desegregation of a society with a 350 year tradition of segregation is a good idea. But we ought not to look puzzled when some of our fellow citizens are not easily persuaded, because

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*Raymond W. Mack is Vice-President and Dean of Faculties at Northwestern University. He is a sociologist and taught in, and chaired, the Department of Sociology at Northwestern prior to his appointment as Dean. He has written numerous books and articles in widely diverse subject areas in sociology. He is a fellow of the American Sociological Association and is a member of its council.

we are asking them to live a new life instead of the one they have been brought up to know how to live.

Bearing this in mind, the second point I would like to make is the extent to which we underrate this revolution in which we are living and participating. I am using the term in its technical sense: drastic change in a social structure, happening in our own time. Because we have not achieved it at the barricades with rifles does not make less revolutionary the amount of social change we have implemented through education.

The magnitude of this revolution becomes evident with a little historical perspective. My father completed eight years of formal education, but he was not a drop-out. To be a drop-out one must fail to live up to a set of socially shared expectations about what he is supposed to do. In 1900, my father finished his eight years of education slightly above the national median of seven plus years. He was a successful American by the American definition of success. A generation or so later, in 1940, the national median for education was ten years. Between 1940 and 1970, the national median moved to more than thirteen years. That is what I mean by revolutionary.

Throughout recorded history, the amount of formal education has defined the intellectual class, those provocative members of society who develop and assess the structure of that society. What that median means now is that if one has graduated from high school and does not go on for more formal education, he has fallen behind. As such he has not achieved as much as my father achieved with less formal education in 1900.

Revolution is also evident in what has happened in education in the last fifteen years in terms of race. In the population category of males aged 25 to 29 in 1956, the median years of education were just over twelve for whites and seven for blacks – a drastic difference. In a credentials oriented society it is the difference between elementary and high school graduation. Fifteen years later the figure was thirteen plus for whites and twelve plus for blacks. That, too, is revolutionary. We have had violent revolutions mounted in this country with a considerably less drastic social program to offer. Within the context of racial tension in this country today, I do not know whether that indicates we do not expect as much as we might of the education we are delivering or whether we have failed to catch up with the consequences of delivering that amount of education to that much of the population.

If we are aware of both the fact that there is a natural tendency to resist change and that we are living during a revolution, then the contents of these papers submitted to this symposium on improving teaching in higher education become provocative.

Talking about improving teaching requires that I talk about the quality of teaching, a subject on which I have such radical views in the circles in which I move that I should give you some of the supporting data. I have been assured that it is not possible to measure the quality of teaching and that is one reason

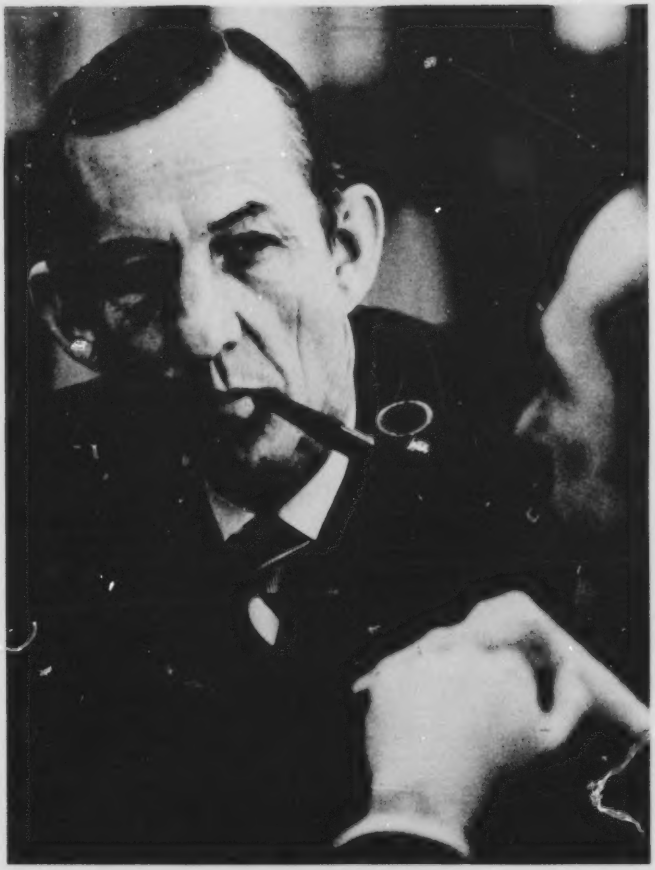
why we measure the quantity of research instead. The idea that we are so efficient at measuring either the quality or quantity of research is fairly humorous to start with. In addition, no one complains about measuring the quality of teaching until such evaluation is brought to bear on decisions concerning rewards. However, as students, none of us had any trouble sharing our assessments of the quality of teaching in our courses with our fellow students and reaching decisions based on such assessments.

At Northwestern, we are in the process of making some decisions on the basis of information included in a volunteer-prepared booklet of undergraduate student evaluations. This booklet contains descriptions of the course contents, distributions on reading and lecture assignments, and essay assessments of the quality of education in the class. (There are several observations one can make about a project like this. One of the most fascinating is that the professors who do not contribute their evaluations are as observable and interesting a set of data as the essay responses and objective distributions.) Using market mechanisms, the booklet can provide a gross estimate of teaching quality; that is, how many students voluntarily take a course nobody is required to take. It is also possible to tell something by the differences at the poles between those courses evaluated as, "One of the best I've had at this University," versus "One of the least informative and uninteresting courses I've ever taken." I do not need to argue the difference between a man ranked 310 and 311, but I am ready to argue the differences between the top ten and the bottom ten courses with a great amount of comfort.

Further, in nationwide summaries each of us can compare what he thinks about one another's departments under such headings as Quality of Graduate Training, Quality of Faculty, and Quality of Research. We compared our departmental ranking results with the national results, and on the basis of such comparison I am here to assure you that the business of teaching versus research is hogwash. Of our five most popular departments, four of them are ranked at the top nationally in research productivity and publications. I cannot give you the same assurance about the three departments that are unable to carry their weight in student interest because their research productivity is so low that they are not nationally ranked. It looks to me like good people do good work.

We all delight in talking about the exception we know. Each of us knows at least one person who is a very classy teacher and has not done any research writing in years, and each of us knows at least one who has a real impact on his field with his publications but is a disaster in the classroom. Why do we spend all our time talking about those two people when we know they are not model representatives of scholarship.

There are many other ideas I could express about change and the revolution in teaching, but it is now time for you, the participants in this conference, to have your say about these issues. I look forward to the results of your discussions.



Dean B. J. Chandler

C. CENTER FOR THE TEACHING PROFESSIONS

*Dr. B. Claude Mathis**

Historians who study higher education and its manifestations during the first half of the Twentieth Century will undoubtedly be aware of shaping influences responsible for leading higher education away from a concern with the one activity which gives meaning to the learning process – teaching. The decade of the 70's has emerged with a strong witness to a renaissance of interest in creative and meaningful teaching from kindergarten through college. Nowhere is a re-evaluation of the teaching function more desperately needed than in higher education. While our colleges and universities publicly proclaim their commitment to teaching, the reward systems found there still place research and related activities in positions of primary importance for those who wish to advance in their profession.

Most critics of the academic scene call for reform within colleges and universities as the necessary condition for a return to the traditions of teaching and learning which should ideally govern the life of the university. Often overlooked is the fact that the mission of any educational institution is defined by the values of the individuals who collectively represent that institution. For educational institutions the values of the teachers, the students, and the administrators are basic to the priorities which determine the direction of educational programs. Students are well aware of the lack of good teaching in the schools and colleges which they attend. This is particularly true of the university level where students have learned to be effective critics of their mentors. Educational reform will be difficult and painful until, and unless, the professions themselves accept the responsibilities which they have toward defining the importance of teaching as a professional obligation. Teaching, especially at the level of higher education, will continue to occupy a lesser priority of commitment until the professions give teaching the same priority of emphasis now given to scholarship and research. The ongoing renewal of any profession, from one generation of participants to another, is as much a function of the manner in which members of the profession teach each other as it is a result of the creative scholarship the profession has contributed.

The Center for the Teaching Professions was established at Northwestern University in the fall of 1969 in response to this increasing concern shown by educational institutions and professions about the quality and importance of teaching in maintaining the vitality of the learning process. The Center has rapidly become a vital part of a university-wide effort at Northwestern to develop and implement a sound conceptual approach to the improvement of teaching

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and curriculum within the university and in other educational settings. The Center is funded by the W. K. Kellogg Foundation of Battle Creek, Michigan, through a six-year grant which established the Center and provides operational funds for that period. The purposes of the Center, as stated in the agreement between Northwestern and the Kellogg Foundation, are: 1) the improvement of the teaching of prospective teachers (graduate students) and present members of the faculty in a variety of fields at Northwestern; 2) service to other educational institutions and professional organizations to improve their teaching program; and, 3) the creation of a model for similar centers at other universities throughout the world that have a continuing responsibility to apply constantly all of their academic resources to the central problem of improving instructional quality.

The Center was established in two stages, with, however, no clear or a priori dividing line. During the first three-year period of effort, emphasis was given primarily to involvement with Northwestern University faculty members in the development and testing of approaches to the improvement of their own teaching. Included in this phase were efforts to prepare advanced graduate students for college or professional school teaching and efforts to help the university in the improvements of its curricula. The second stage of Center operation builds upon those techniques and strategies which were supportive of the first stage and projects the operations of the Center beyond the campus of Northwestern University into other educational settings and programs of a national and international nature. The Center serves as a demonstration of effective programs, facilities, and equipment to improve teaching. In other educational settings in which a serious commitment to the improving of teaching is made, different organizational patterns and programs should emerge in accordance with the indigenous resources, traditions, and priorities of each setting. A major concern of The Center for the Teaching Professions is that such programs be initiated, and that the programs of the Center at Northwestern University will provide effective and functioning examples.

The Center for the Teaching Professions is under the administrative direction of the Dean of the School of Education of Northwestern University. This administrative arrangement was established in the belief that the responsibilities of faculty in the field of education should go beyond the traditional role of preparing teachers for the public schools and education faculty for other universities. The Center's involvement with the School of Education is testimony that those who are prepared as scholars in the field of education possess skills which are important for the improvement of teaching and learning in disciplines other than their own. The Center for the Teaching Professions was established at a time in the history of Northwestern University when general concern throughout the university community for the improvement of teaching and learning had become a subject of frequent discussion among students, faculty, and administrators. Attitudes which emerged from these discussions were a support for efforts to improve teaching and learning within the university. These efforts e-

merged from the concerns of those persons within Northwestern University who realized the need for constant examination of the mission of an educational institution like Northwestern. A Center for the Teaching Professions in this context represents the natural evolution of a logic about the role of teaching in higher education which finds expression in those programs and strategies most productive in stimulating the improvement of teaching within the various professions.

In a recent publication sponsored by the Center, *Theories for Teaching*, Professor Lindley J. Stiles, the editor of the publication, has this to say about The Center for the Teaching Professions (80):

> The Center was conceived out of an awareness that of the three key ways that professions maintain and advance themselves, namely, *teaching*, *practice*, and *research*, teaching has been the most neglected function. When a profession does a poor job of teaching its future members or practitioners in service, it nurtures a weakness that, in terms of its overall impact, no amount of inspired and dedicated individual performance or creative research can counteract. Thus to improve a profession the first priority must be to improve the effectiveness of its teaching. And because professional training is built upon the learning that has taken place at pre-professional levels, members of a profession must be concerned, also, with the effectiveness of teaching in elementary and secondary schools as well as in undergraduate colleges.

The Center for the Teaching Professions has initiated a number of projects and programs to carry out the objectives agreed upon by the W. K. Kellogg Foundation and Northwestern University. Three specific examples of general program development are as follows: 1) A program of Faculty Fellowships for innovations in teaching was introduced during the first year of operation of the Center. This effort has proved to be one of the most popular programs available at the Center for faculty members. It provides a mechanism for faculty to become more closely associated with the activities of the Center and to interact with each other through common interests in the improvement of teaching. The Faculty Fellows represent individuals who have already demonstrated a commitment to creativity and change in their university teaching. They are actively engaged in experimentation in teaching, and their association with the Center provides the basis for a regular interchange of ideas about teaching with each other and with students in varying disciplines who themselves are interested in preparing to teach in higher education.

Faculty Fellows are assisted by the Center to the extent of some financial support for basic needs in their teaching. The resources of the Center are used by them to plan for experimentation in teaching, test new ideas about curriculum change, and develop self-assessment programs for their own teaching. The strategy which the Center has utilized in the development of the Faculty

Fellow Program is that of identifying the individuals who have demonstrated a commitment to experimentation in teaching. The support provided through the Faculty Fellow Program does not give the faculty member released time or additional salary increments. Instead, the Center has found that with a relatively small amount of money activities can be sustained by providing the necessary supports for innovation in teaching at the time needs are expressed.

2) A Seminar on College Teaching for advanced graduate students was initiated during the first year of Center activities as a result of the awareness of the need for developing a procedure to allow those graduate students who wish to have formal preparation for teaching to take advantage of systematic resources for this purpose. A Seminar on College Teaching was introduced into the curriculum of the university as one way of providing opportunities for these students to receive instruction and practical experience in college teaching. The Seminar on College Teaching is now a course listed for credit in the graduate school catalog. Growth in departmental interest and graduate student registration has occurred consistently each quarter since the introduction of the Seminar.

The Seminar on College Teaching represents a worthwhile innovation in a number of respects. First, it is sponsored by the Graduate School rather than by an individual department or professional school within the university. Any graduate student in any department can enroll for a maximum of two quarters. Second, under the current plan each department offering the Seminar assumes responsibility for directing and developing the content and procedure for the Seminar. This is in deference to the belief that teaching engineering may require a somewhat different array of skills than teaching in English or philosophy. Third, by offering instruction in teaching under the auspices of the Graduate School to any interested graduate student, Northwestern University makes an implicit statement concerning the compatibility of teaching and scholarship. These multiple intentions of the Seminar on College Teaching have been clearly expressed from the outset by those responsible for its formulation and approval.

Although the Seminar on College Teaching was conceptualized originally as a vehicle for use by graduate teaching assistants to help them prepare for teaching, the Seminar has gained increasing use by doctoral students who are not involved in the instructional programs of the university. The staff of the Center feel that the increasing number of registrations in the Seminar suggest that the doctoral programs of the university are attracting students who feel a need for preparation for teaching as well as research. The Center looks upon the Seminar on College Teaching as a major program effort which has been introduced into the academic life of the university with the assurance of continuity based upon the demonstrated need for it.

3) The Center for the Teaching Professions has initiated a number of projects with professional associations for the purpose of implementing cooperative activities which could be of benefit to the associations in emphasizing teaching

as a significant aspect of the role of members of the profession. The staff of the Center feel that one of the major undeveloped needs concerning the improvement of teaching nationally relates to the concern and need of professionals themselves, especially those in the academic professions, to prepare themselves for the teaching roles which are being demanded of them. The responsibilities in this area of preparation for teaching which should be assumed by professional associations are only now beginning to be discussed and translated into active programs within the associations themselves. The Center for the Teaching Professions has vigorously pursued, and will continue to pursue, relationships with professional associations in order to develop methods and strategies for helping associations rediscover the role of teaching as an honorable calling for professionals. Progress and improvement in any profession demand creative teaching within the profession to parallel research commitments.

A more detailed explanation of the programs of The Center for the Teaching Professions can be found in its Annual Reports which are available from the Center. It has been said, "People exist for the sake of one another. Teach them, then, or bear with them." The Center for the Teaching Professions is dedicated in all its efforts to the belief that the function of teaching and learning in any educational context is as important as the contributions of scholarship which teaching and learning disseminate. Anyone whose role could be called that of a professional must at some time come to terms with the teaching responsibilities which professional obligations imply. In our contemporary world, dominated as it is by many emergent value systems, the problems of change and the demands of change are critical. The threat of obsolescence faced by all professionals who do not have access to continued education experiences designed to help sustain excellence is a constant one. Professionals in every field of endeavor can avoid this threat by continuation of learning throughout their active careers. Teaching is a crucial factor in keeping this life-long learning viable and creative. The development of a sound conceptual approach to the improvement of the one function that cuts across all professions – teaching – is a critical ingredient in any strategy of adaptation to change. The Center for the Teaching Professions at Northwestern University views its mission as that of addressing its resources to this one vital function.

II. A FOUNDATION PERSPECTIVE

Foundations play an important role in the improvement of teaching in higher education because of their ability to foster innovation and development through financial support. Public and private foundations are committed to promoting change in social and educational institutions. A number of national foundations in the United States are concerned with instructional improvement and have provided grants for a variety of innovative efforts for the improvement of teaching.

One foundation particularly involved in program support for the improvement of instruction in higher education is the W. K. Kellogg Foundation of Battle Creek, Michigan. This point is amplified through its willingness to support the development of The Center for the Teaching Professions at Northwestern University and to join in co-sponsoring this conference on The Improvement of Teaching in Higher Education. Dr. Russell G. Mawby, as President and chief spokesman for the Foundation, explains the role of the foundation in stimulating the development of educational experiments, with more direct focus on current interest in the development and improvement of teaching in higher education. He outlines the criteria of the Foundation for program support and discusses important constructs in proposal analysis such as institutional commitment of resources, nature of program format, importance of idea and problem, quality of program design, assessment of institutional capacity for innovation, quality of institutional leadership, and replicability of model in other institutions. Dr. Mawby concludes his article by pointing out the alternative approaches which the Foundation presently is considering in the area of the improvement of teaching. These program approaches serve as a guideline for those individuals and institutions interested in seeking financial assistance. They denote broadly the parameters for which program development in institutional improvement is viewed by the program staff and Board of Trustees of the Kellogg Foundation.

A. W. K. KELLOGG FOUNDATION: A MODEL FOR PHILANTHROPIC PARTICIPATION IN HIGHER EDUCATION INSTRUCTIONAL DEVELOPMENT

*Dr. Russell G. Mawby**

"Education offers the greatest opportunity for really improving one generation over another." This conviction of W. K. Kellogg has characterized the program activities of the Foundation which he established in 1930. A central purpose of program activities through more than four decades and on four continents has been the expansion and improvement of educational opportunities for people of all ages, interests, and circumstances.

In fulfillment of the distinctive role which private grant-making foundations play in American society, the central emphases of this Foundation have changed through the years. The educational contributions of this Foundation can be traced through the years with a simplified chronology only suggestive of the range of foundation interests – in the 1930's, an expansion of educational opportunities through consolidated high schools in rural communities; in the 40's, the improvement of elementary and secondary education through preparation of professional administrators; in the 50's, a stretching of educational opportunities through encouragement of continuing education programs of colleges and universities, through residential centers and innovative programs; in the 60's, a dramatic expansion of educational opportunities especially through growth and development of community colleges. These and other major program thrusts of the Foundation reflected the educational needs and the vision of educational leadership at respective points in time.

The Foundation, like other institutions with limited resources, is continually confronted with the difficult process of establishing priorities for utilization of its funds. The determination of these priorities is the ultimate responsibility of the Foundation's Board of Trustees. In the decision-making process the Board draws heavily upon the expertise of its professional staff and, through them upon informal and formal consultation with individuals and ad hoc advisory committees of experts in the Foundation's field of interest. Through this process and in common with other observers and students of higher education, a concern for the quality of teaching in institutions of higher education began to emerge in the mid and late 1960's. Thus, as the era of very rapid expansion of educational budgets and growth of individual institutions drew to a close in

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the turbulence of the late 1960's, a concern for instructional improvement in higher education was identified as an appropriate area for Foundation consideration.

Once a broad problem or program area is identified, we, as officers, next have the task of determining the ways in which our Foundation can make a constructive contribution. Philosophically, our Foundation is committed to knowledge utilization, to the application of knowledge to the problems of people. We do not support research per se, but rather lend assistance to action programs in which knowledge resources are applied in new, innovative, and experimental combinations or ways.

In teaching – as in most areas of human endeavor – we *know* better than we *do*. Thus, the challenge to the Foundation in the area of instructional improvement in higher education is to identify opportunities for assisting institutions in their effort to fulfill more completely their teaching responsibilities.

In the evaluation of specific proposals, certain considerations come to bear. Each is important and an integral part of our ultimate assessment of an individual proposal. In evaluating a specific proposal, our first concern is with the idea – with the nature and significance of the problem which is identified, with the statement of purpose, and with the program which is proposed. To bring about significant improvement in the teaching performance of an institution requires a program of consequence, carefully conceived and comprehensive and penetrating in character. Too often a desire to improve instruction is indulged through fragmentary and superficial, and therefore inconsequential, exercises.

An essential element in our review of a proposal is evidence of institutional commitment. The very nature of the problem requires full commitment – intellectual, operational, and fiscal. There must be evidence of commitment in the organizational structure – the board of trustees and administrative officers –and throughout the academic community, including academic administrators and faculty. Without such commitment, any infusion of outside funds will be meaningless.

Beyond the consideration of the institution's commitment is an assessment of the capacity of the institution to undertake the program proposed. This includes a review of the qualifications of the leadership of the project and the faculty resources and other inputs which the institution may either have available or be able to secure with additional funding. The proposed program should be appropriate to the problem and to the institutional setting and need.

As a part of an assessment of institutional commitment, we are interested in the tangible inputs of the institution to the effort as well as their intellectual support. Because of our very limited resources in relation to program opportunities, and because of the significance in the area of instructional improvement in bringing about institutional change, we feel there must be input from the institution. As a part of the budgetary assessment, we are concerned with anticipated benefits in relation to the investment and with the scale of funding in relation to the recipient's eventual capacity for continuing support. While innovative and ex-

perimental efforts very often are high cost, there must be the prospect that, if successful, the proposed venture is an economic feasible avenue for improvement of the instructional process.

Because we can assist only a limited number of institutions in their efforts to improve instruction, we are concerned with assisting the development of various models in terms of approach and institutional setting. Hopefully, these varied models, as their success is demonstrated, can be replicated in and be useful to other institutions with similar concerns. To this end, in experimental programs of the past, we have assisted both public and private institutions, large and small, and geographically dispersed throughout the country. Our involvement to date in the area of instructional improvement has not progressed to a full scale network of demonstrations but more extensive assistance is anticipated.

Dr. Steven T. Holbrook, co-editor of this volume, served as a Program Director on our Foundation staff on a special two-year appointment, 1971-1973. Among his major responsibilities and contributions was the development of a conceptual framework for Foundation assistance in the area of instructional improvement. Among the alternative approaches which he outlined and to which we are giving consideration are the following:

1. In-service training for faculty development;
2. Pre-service training for instructional leadership;
3. Curriculum reform and innovation;
4. Experimental models for instructional improvement at the university, small liberal arts college, and community college levels;
5. Programs of national organizations which can provide support to institutions in the area of instruction;
6. Projects specifically addressed to the assessment and evaluation of teaching;
7. Experimental models concerning organizational responsibility for instructional improvement in institutions;
8. Assessment of the impact of instructional improvement in such areas of concern as cost effectiveness and student attrition;
9. Programs in related areas such as institutional management;
10. Instructional improvement in professional schools;
11. Programs with national organizations which possess special expertise in instructional areas, such as teaching evaluation; and
12. Programs of instructional improvement in non-traditional programs, such as the external degree and instructional television.

To date the Foundation has ventured into certain programs reflecting one or more of the approaches suggested.

In their troubled contemporary condition and in their efforts to regain the confidence of America and fulfill their potential in contributing to human betterment, institutions of higher education are rededicating themselves to excellence in their essential function: teaching. Hopefully, the resources of foundations such as ours can be useful in assisting them to that end.

COMMENTS

The choice by foundations of teaching as a suitable priority area for granting funds is partly a recognition that higher education institutions and professionals are ready to undertake the problem of ineffective teaching with practical and sound programs. Equally, the new interest in this area by foundations suggests a recognition that federal and state governments as well as individual institutions are not directing enough support toward programs concerned with teaching and faculty improvement.

Foundation involvement in this area is logical for a number of reasons in addition to providing financial support. Unlike the federal government, an individual foundation can operate more flexibly in its decision to fund particular programs and projects. As a result, foundations not only read the pulse of new emerging trends in higher education, but can move quickly to support and foster innovative projects. The larger foundations have highly qualified staffs who often provide a consultative role to institutions. Also a foundation has national contacts which permit the foundation and its program officers to function in a communication role as well.

Dr. B. Claude Mathis

The development of The Center for the Teaching Professions at Northwestern University is one example of the program support for instructional improvement provided by the W. K. Kellogg Foundation. Dr. Robert Kinsinger, as Vice President for Programs in Education, has provided leadership for program development in this area. A number of projects have received financial assistance from the Foundation, including centers and clinics at the university level, competency-based curriculum and innovational undergraduate education programs at the private liberal arts college level, and an in-service teacher training and experimental staff model at the community college level. In addition, the Foundation supports a consortium model and gives program support to national agencies such as The Educational Testing Service (ETS).

In the following article, Dr. Kinsinger's remarks provide further insight into some of the experiments currently taking place nationally as well as an example of the criteria necessary for program consideration by a foundation.

B. KELLOGG FOUNDATION CONTRIBUTIONS TO THE IMPROVEMENT OF TEACHING

*Dr. Robert E. Kinsinger**

One discovers in reviewing the quality of instruction generally offered on college and university campuses that a foundation has several strategies it might employ to alter significantly the "state of the art." To provide assistance aimed at improving this fundamental educational concern a foundation might plan, staff, and provide direct support for a regional or national remedial program. One national foundation has launched a direct support program. However, the W. K. Kellogg Foundation, by considered policy, restricts its involvement to grant-making and assists other institutions, associations, and organizations in developing responses to major national problems and issues. The rationale for this approach is clear. The Foundation seeks to stimulate programs by providing "seed" or "start-up" monies that will provide the basis for activities that will, once their worth is proven, be carried on with regular operational funds not dependent on Foundation aid. The Foundation also tends to look to a diversity of projects all focused on a single broad objective. Hence, the Kellogg Foundation has provided assistance for a number of activities, in addition to its aid to the Northwestern University Center for the Teaching Professions. The nine projects described below represent alternative approaches to the concern for the improvement of instruction in higher education.

One promising approach to the problem at the university level is that of the University of Massachusetts' Clinic to Improve University Teaching. The Foundation has provided funds for a three-year program with the School of Education at the University of Massachusetts, Amherst. The Clinic to Improve University Teaching will concentrate on instructional problems through a diagnostic procedure which permits individual faculty members to develop and enhance their teaching competency. The following are specific objectives of the Clinic: analyzing programs of teaching, assessing teaching competencies, developing resources for use by teachers, involving students in the process of teacher improvement, identifying and developing effective instructional methods (skills), raising the prestige of teaching as part of the reward system in colleges and universities, and assisting other institutions in the development of clinics to improve teaching. Initially, however, the focus is on the refinement of diagnostic tools concerned with identifying technical skills of teaching and learning as a basis for the improvement program.

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The unique aspect and the strength of the University of Massachusetts' program is its sound clinical approach. The Clinic staff and the diagnosticians will first be concerned with the various skills of teaching. Examples of a few skills are: asking questions, setting the stage for a lesson, verbal fluency, recognizing attending behavior, inspiration, and lecturing. Through a process of utilizing video tapes of teaching performance and a specifically designed questionnaire entitled, "A Student-Centered Analysis of Teaching," the diagnosticians will be able to isolate the specific instructional problems of professors and graduate teaching assistants. Once these problem skills have been identified, the Clinic will assist the instructor in remedying his problems through individually tailored teaching improvement situations. The Clinic for Micro-Teaching at the University of Massachusetts will be utilized to provide instructors and students with the opportunity to observe teaching situations. Through video taping and analysis of other instructional data, professors will practice improved procedures for delivering information and instructing students. The Clinic's central mission will be to develop a pool of resources which can meet the diverse teaching problems of individual professors.

The University of Massachusetts' program looks promising because in its basic design are the seeds for determining and solving isolated problems of instruction. If this approach to improving instruction at the university level proves successful, the logical outcome would be the utilization of this approach at centers and schools of education nationally.

The Foundation has also provided support for small private liberal arts institutions. Traditionally, the liberal arts institution has been recognized as a teaching institution with less emphasis placed upon research than at the university level. In recent years, private liberal arts institutions have not only faced financial problems but their reputation as excellent teaching institutions has been questioned. Recently, some of these institutions have begun to redesign curricula, establish outreach programs, and develop faculty in-service training programs. As an aid to the movement toward instructional improvement, many of the private liberal arts colleges have banded together and formed associations to support efforts designed to improve the instructional quality of their institutions. The Association of Independent Colleges and Universities of Michigan (AICUM) is an example of one association.

The Foundation has provided a three-year commitment to AICUM for implementation of a faculty development program with the 28 institutional members. This project serves as a model for associations which are attempting to provide interaction among institutions in the area of instructional improvement. While the main objective of the AICUM program is faculty development, its program has three significant components. Fellowships are provided to selected faculty members in institutions for a year's leave of study designed to improve the quality of professional instruction. Individual institutions through AICUM help to provide fellowship support. A second component of the program is summer

seminars. These seminars are developed by individual institutions in joint collaboration with AICUM and are concerned with major problems and issues of instructional importance in private liberal arts institutions. A third component, workshops, is an outgrowth of the summer seminars. During the academic year, 17 workshops held on campuses throughout Michigan dealt specifically with teaching problems and undergraduate education.

There are several strengths in this model of instructional improvement. One is the importance of strong association backing that is provided by AICUM. Small institutions often have difficulty in launching a major instructional improvement program. Also, arrangements for special study by individual faculty members are managed more efficiently through an association representative of all institutions. The logical effect of this approach is increased interaction between institutions and the pooling of resources for a coordinated effort at solving a major problem facing all institutions.

The Foundation also is supporting experimental projects in two small private liberal arts institutions, Davis and Elkins College (West Virginia) and Sterling College (Kansas). The rationale for their funding includes the following:

1. Each college had undertaken a complete institutional review of program needs;
2. They had determined to develop totally new instructional programs including specific curricula changes;
3. The provision of in-service faculty training was considered high priority;
4. The instructional improvement plans cut across all disciplines and involved the total faculty;
5. Relationships had been established with national organizations such as the Council for the Advancement of Small Colleges and the American Association of Colleges relative to their instructional improvement plans; and
6. The faculty development programs and instructional improvement models are replicable in other small liberal arts institutions.

With the above rationale, the chance for successful total institutional improvement of instruction is highly probable.

Davis and Elkins College is an institution with 800 students and 53 faculty members. In 1971, the school developed and adopted a program called "Alternative Futures," which included governance changes, development of educational opportunities outside the traditional classroom, adoption of new knowledge fields, planning for interdisciplinary learning, and utilization of innovative instructional methodologies. Foundation funds were appropriated for a faculty development program designed to implement the new educational program. The two-year program of faculty professional development will include workshop activity during the summer session, follow-up seminars and workshops during the academic year, outreach potential to other institutions, and an evaluation and report. The summer workshops, geared toward assisting those instructors who are developing new interdisciplinary courses involving team teaching, will

provide training in course content, development, and methods of teaching. Other workshops will emphasize student advising, the affective or behavioral component of learning, academic evaluation, and student affairs. Professional consultants will assist the faculty in the development of experimental instructional projects. The program at Davis and Elkins College is an appropriate model for other small private liberal arts institutions. Its Alternative Futures program has already received national attention.

Sterling College has 550 students and 41 faculty members. Foundation support is provided for a faculty development program similar to that of Davis and Elkins College. The unique aspect of Sterling's program is the competency-based curriculum which was developed by faculty members. The faculty development program is designed to provide training in teaching strategies and evaluation of student learning. The in-service training phases of the program are concerned with course construction and related instructional adjustments, the evaluation of the learning experience, the implementation process of experimental instructional approaches, and an evaluation of the in-service training and its effect upon the quality of instruction and educational offerings at Sterling College.

The institutional approaches to instructional improvement as embodied in the Davis and Elkins and Sterling College faculty development programs are important approaches toward the dissemination of information and help to sustain the liberal arts institution as an institutional form for providing quality liberal arts training. If these programs are successful, they may help to increase student enrollments in liberal arts colleges. The Foundation is providing an important emphasis by helping private liberal arts institutions, for, if higher education is to remain innovative, a diversity of institutional types must be retained.

National organizations play an important role relative to instruction in higher education. Traditionally, colleges and universities assumed responsibility for teacher preparation and instructional improvement. With the onset of alternative approaches to learning, national organizations have undertaken the responsibility to provide instruction through in-service or continuing education programming. One of these organizations with a substantial educational development background is Educational Testing Service (ETS). ETS reports that, "The three-year Kellogg Foundation grant to develop a series of courses on the use of assessment, evaluation, and information systems for decision making throughout the full range of the educational enterprise gave significant initial impetus to the development of ETS instructional programs." ETS' emergence as an instructional organization was motivated in response to demands for individualization, relevance, and accountability in education. In addition, the concept of education as a lifelong process supported the movement for the development of continuing education programming by ETS.

Foundation funds provide for the development of eleven institutes which are highly structured three to five day in-residence learning experiences that are problem-oriented, content-centered, and sequentially structured. The institutes

utilize team teaching, multi-media presentations, case studies, and other interactive techniques. The objective is to develop the instructional programs at ETS' Princeton headquarters and then to duplicate the programs in regional locations throughout the United States and in many instances in co-sponsorship with colleges, universities, school districts, and other educational agencies. The first institute offered was "Assessment and Evaluation in Educational Planning." It was directed toward educational leaders and administrators. The second concerned "Assessment for Guidance of Minority Adolescents" and participants were largely directors of minority group programs and counselors at the secondary school level. Institutes in the planning state include "In-service Teacher Evaluation," "Assessment and Evaluation in Early Childhood Education," and "Assessment and Evaluation in Continuing Education."

A major strength of the ETS program is its national system for dissemination of instructional programs through widely dispersed branch offices. Because of ETS' knowledge and expertise in educational program development centers on concepts of evaluation, information systems, and assessment techniques – essential skills for leaders in decision-making positions. Few national organizations or universities are as well equipped as ETS to develop instructional programs in this area. Higher education institutions are in need of this expert in-service and continuing education instructional talent.

To provide an additional model for small, private, liberal arts institutions, the Foundation has underwritten an innovation centered upon curriculum change and instructional improvement activities at Mars Hill College, North Carolina. This private institution of 1,500 students in Southern Appalachia was selected for a pilot effort after the College's Board of Trustees approved a new educational program which involved sweeping changes in the total environment of the College, a program which proposed a framework of varied learning experiences.

Three assumptions about teaching and learning undergird the new educational program.

1. Learning is a total experience which extends beyond the classroom in time and place.
2. The students' individual development is at the center of the curriculum.
3. Students are characterized by multiple talents and differing levels of talent development. In order to assist each student toward utilization of his or her total personal potential, the curriculum should be a means of both identifying the students' various talents and promoting their fullest possible development.

These principles of learning and teaching suggest an accent upon the student as a learner and his individual needs. The student body of Mars Hill College, like similar institutions, reflects a wide variety of levels of student growth, including a number of students from the Appalachian area and transfers from nearby technical schools and community colleges.

The goal of the project is to develop a competency-based curriculum and related programs for improvement of instruction. The new curriculum is intended

to serve as a basic tool to stimulate more efficient student learning and more effective teacher instruction. The development of specific criteria to be used in the measurement of rate and levels of student learning, as well as effectiveness of teaching techniques and instructional goals, is the heart of the competency-based curriculum. Given the pressures to make educational institutions more responsive to societal needs and accountable for overall student development, the competency-based curriculum provides at least one model by which institutions of higher education can respond constructively to the challenge before them.

The Foundation also awarded a grant to the Ontario Institute for Studies in Education (OISE) in Toronto, Canada, to develop a national program concerned specifically with graduate-level instruction in professional fields for the improvement of instruction in Canadian institutions of higher education. The focus of assistance to Canadian professional schools was on the improvement of instructional methods, the application of new educational technologies, and the redesigning of curricula.

The first two years of the program were successful in identifying the faculties across Canada who were beginning realistic innovations and who needed technical assistance. Through publications, consultation, national conferences, and seminars, professional groups began to interact and share innovative programs. The Resources Center of OISE provided professional assistance on instructional strategies and the development of curricula plans. A significant outcome of this approach was the interaction of educators and professionals utilizing the process of instructional efforts applicable to numerous fields of study. Approximately ten issues of *Renewal*, the project newsletter, were published during a three-year period and distributed to over 1,600 Canadians in fifteen professional disciplines including teachers, administrators, professional association officers, and journalists.

During the final year, efforts were focused on small concentrated regional workshops in an effort to provide a more extensive thrust within specific geographical areas throughout Canada. A workshop held in Toronto was concerned with instructional innovations in engineering, medicine, dentistry, and architecture. The participants represented ten of the most innovative faculties in five Canadian universities. Other workshops involved professors from law, theology, education, and nursing. The project also included follow-up workshops and programs in other regions of the nation. This particular approach was successful in bringing a number of seemingly valuable innovations in Canadian professional education into small, intensive arenas for examination and cross-inquiry to see how the new ideas could be applicable within and across professional disciplines and schools. At the same time, a repertoire of teaching/learning strategies and curricula designs were developed which permitted the participants to recommend these approaches to their professional school faculty and working colleagues.

The strength of the OISE project appears to be its ability to deal with difficult instructional problems and to develop strategies and experimental innova-

tions which transcend disciplines. This has been a problem that has also plagued American professional educators. Through the efforts of OISE, Canadian institutions have benefited in professional field development. Of particular difficulty is the geography of Canada and the problems of persuading institutions to interact and cooperate across provinces. The activities of this project demonstrate that cooperation among institutions throughout Canada can be accomplished.

The Kellogg Foundation has had a special interest in the community college for over a decade. Therefore, in seeking strategies for improving the instructional process, the unique problems of the community college were considered. The first grant, focused on community college staff development, was to Los Medanos College in California. Foundation assistance is for implementation of an internship model for the induction and professional development of new staff members for community colleges and for experimentation with the concept of a Professional Development Facilitator, a staff position responsible for institutional instructional improvement and faculty development.

Presently, over 1,000 community colleges are spread throughout the United States with a total staff of approximately 122,400 teachers, counselors, and administrators providing training and education to over two million students. The numbers of faculty represent a 375% increase during the past decade. It is estimated that by 1980 there will be 3.6 to 4.3 million students enrolled in two-year colleges. At least 216,000 staff members will be required representing an increase of approximately 3,970 new staff members per year. The state of California is already experiencing this increase as approximately 80% of all students entering higher education institutions are enrolled in community colleges. This is compared to a national average of 50%. Closely associated with the reality of increased numbers of students is the quality of education delivered by these institutions. In the effort to increase the availability of staff members for community colleges, little attention has been given to staff development.

Pre-service preparation programs have largely been concerned with preparing individuals in subject-matter specialties. The problem with community college professionals is not one of "command of subject" but in professional training relating to the transmission and the sharing of knowledge, attitudes, understanding, and wisdom between teachers and students. For example in 1969-70, 1,781 full-time faculty members were hired in the California community colleges. Of those not formerly associated with community colleges, 546 were recruited from secondary schools, 344 from four-year colleges, and 459 with new M.A. degrees. Of this number, only forty had been prepared through community college practice teaching. At the same time, community colleges were providing little in-service professional development. This existed because there is no budget allocation for staff development and no one in a staff position is designated to carry out this responsibility. While college presidents and deans of instruction have provided kind words about professional development of the staff, neither have the time nor the preparation to develop and implement faculty development programs adequately.

Los Medanos College of the Contra Costa Community College District has developed a faculty improvement program incorporating an internship model and the Professional Development Facilitator concept which holds promise for adoption by other community colleges. In California, which has experienced great growth periods in the community college movement, the trend is toward an increased focus on staff training and faculty development. The logic supporting the argument for replicability of staff development training models relates directly to the increase of new students and instructors at the community college level. Also, it takes premium quality teachers to maximize the potential of the diverse and often high-risk students attending community colleges. The shift toward in-service training of faculty supports the view that the best place to make subject-area specialists into talented instructors is the community college itself and that the time to make these individuals into sensitive, skilled, and dedicated instructors is during the first year of teaching. The internship program is designed to bring about a metamorphosis in the new teacher through a year-long highly enriched internship program.

COMMENTS

Dr. Kinsinger has presented a description of Kellogg Foundation supported projects in instructional improvement. A number of other national foundations are involved in this area of support in varying amounts of assistance. The following is a summary of program assistance for the improvement of teaching in higher education reflecting the efforts of the Danforth Foundation, Carnegie Corporation, Ford Foundation, Kettering Foundation, and the Alfred Sloan Foundation.

The Danforth Foundation has been involved in programs supporting teaching for a number of years. The opening article of their 1971/72 report is entitled "The President's Review: The Improvement of College Teaching." In this article Danforth's president emphasizes the myths associated with teaching and discusses Danforth Foundation programs concerned with teaching. The Harbison Awards Program which annually rewards ten outstanding teachers across the nation has been changed following a review of the program. The evaluations of the Program indicated that general attitudes about teaching were not influenced nor was good teaching more rewarded as a result of the Harbison Awards. Also some fellowship programs are being halted including short-term leave grants. The re-examination of programs reflects changes in emphasis and approach, not a wavering of the Foundation in its long-term concern for the improvement of college teaching (27). Two new programs are being added, an Institute for College Development and a Community College Institute. In contrast to the Kellogg Foundation, Danforth administers and operates a number of its programs, some of which are academic conferences for professionals concerned with teaching. One of these is the Danforth Associate Program in which 2,500 faculty couples from

over 700 colleges and universities have participated in workshops and conferences. A number of publications have resulted concerned with improved student-faculty relations and the strengthening of the teaching-learning process. The Danforth Graduate Fellowship Program attracts people to the teaching profession. The Workshop on Liberal Arts Education has involved 25 colleges and universities in exploring the problems of liberal arts training and teaching. A similar Institute for Community College Development has involved 22 institutions. In 1972, the Danforth Foundation became concerned with "the institutionalization of new means to encourage faculty to learn about teaching, to be concerned about teaching, and to entertain new ideas about teaching." As a result they supported the development of Centers for Teaching Effectiveness at the Universities of Kansas, Nebraska, New Hampshire, Utah, Vanderbilt University, and the Kansas City Regional Consortium for Higher Education (27).

Another foundation with interests in improving teaching is the Carnegie Corporation. In 1966, the Carnegie Foundation for the Advancement of Teaching was established. An outgrowth of this has been a number of publications dealing with research in higher education (19). The Commission on Higher Education which developed the publications is now entering its final year after receiving $5,567,000 (20). One area of interest of the Carnegie Corporation has concerned the degree structure and the appropriateness of the Ph.D. for college teaching. In 1966, the Carnegie Corporation supported Carnegie-Mellon University's introduction of the Doctor of Arts degree. In 1969, planning grants were made to ten institutions for the support of developed D.A. and related programs. These grants included supervised teaching experience as well as discussions of important questions about both teaching and higher education in general (19). More recently funded programs reflect growing interest in alternatives to the traditional four year college degree. An emphasis on credit by examination, time shortened degrees, and flexible independent courses of study has taken place. This is reflected in the Carnegie Corporation support of the Commission on Non-Traditional Study (20).

The Ford Foundation is increasing support for programs relating to the improvement of teaching. Major emphasis has been in assistance to minorities. Large sums of money have been provided to private black institutions to improve undergraduate programs. These have largely concerned strengthening faculty and curriculum. Some fellowships for graduate study have also been included. In 1972, Ford continued with the third year of its Venture Fund Program for innovative undergraduate education. A total of $4 billion has been granted to 24 colleges and universities. In addition, support has been provided for programs with the external degree and other experiments in instructional patterns. Two grants were made for teacher preparation programs for colleges and universities. Over $6 million has been directed to ten universities for improving the effectiveness of doctoral studies in the humanities and social sciences including a provision for apprentice teaching experience (38). Other Ford program grants are not direct-

ly related to teaching though they result in stimulating concern for improved instruction.

One of the smaller foundations with interest in instructional improvement is the Kettering Foundation. Approximately one-half its annual budget is earmarked for education, and instructional improvement appears to be an area for future use of funds (21). Of interest is the evaluation study of Kettering's efforts in the decade of the sixties. The Foundation discovered that several specific areas of activity had yielded unusually large success or failure rates. Some 83% of the projects on instructional improvement produced high quality results. In addition, the data from the study show a statistically significant relationship between the size of a grant and its success. Grants amounting to $150,000 and over produce the least satisfactory results, whereas grants in the $20,000 - $40,000 range yield most successful results. The study concluded that appropriate timing, a cooperative work environment, and outstanding personnel are the basic requirements for project success (21).

The Alfred P. Sloan Foundation's interest in education has focused on the uses of technology in higher education. Concern about teaching was expressed in the 1972 annual report (2):

> It is obvious that new technologies will not take hold at the higher levels of education unless more faculty members become strongly interested in pedagogy and become aware of how technology may strengthen teaching. Some grants were therefore made for projects to expose teachers to the possibilities of instructional technology, and to provide them with expert technical help to develop courses employing educational technologies.

Examples of recent grants are Southern Medical School Consortium for a Self-Instructional Materials Project and the University of Illinois Chicago Circle Campus for an "Alternative Ph.D." program which will seek to create a supply of college teachers whose first interest is in teaching and who are thoroughly familiar with the various technologies of teaching (2). Also in 1970, the board of the Sloan Foundation approved a program designed to reduce the costs of education and simultaneously improve the quality of instruction. The program began modestly in 1971 with a small number of grants with the hope for more extensive program efforts in future years (1).

The above description of foundation contributions to innovations in instructional improvement is not exhaustive but it suggests a strong commitment of philanthropy to teaching. Institutions of higher education can benefit greatly from tapping the resources of these foundations, both financially and professionally, as they develop new thrusts within their respective institutions. Foundations experimenting in this area have developed worthwhile expertise regarding what does and does not appear to work successfully. This knowledge coupled with an institution's appraisal of its own ability to innovate could be channeled into strong program development resulting in effective teaching improvement.

III. IMPROVING TEACHING IN AMERICA

*Dr. Kenneth E. Eble**

In August, 1969, I moved to Washington, D. C. to become a project. I had an office, one secretary, three defined objectives, funds from the Carnegie Corporation, and two professional associations – the American Association of University Professors and the American Association of Colleges – behind me. I had no illusions about improving college teaching greatly, but I had agreed to carry out the proposed objectives. These were described in the project's literature as *evaluating teaching, career development of the effective college teacher, and optimum working conditions for effective teaching.* These were concerned primarily with the interrelation between administrators and teachers within the structure of higher education, and thus the project was only partially involved in such important matters as exploring innovative teaching strategies, technological aids to learning, and new structures for classrooms and institutions.

I arrived in Washington in the hottest of months and the gravest of times. I left a year later, feeling by then that Washington served best as a place to come in protest or to leave in hopes of finding something better. National Airport sits conveniently close to the federal buildings. One can go in and out never seeing anything but the Tidal Basin and cherry trees and monuments to American greatness. Legislators travel that way, in taxicabs whose rates are kept cheap by Congress just for that purpose. Education in federal Washington deals with the big picture, with implementation and utilization and inputs and interfaces and accountability. Education in real Washington is its own schools, exemplars of what race, power and affluence in America can do to teaching and learning in the cities. As the year went on, I spent more and more of my time out of Washington. The second year I operated out of Salt Lake City.

Out in the territory, there were the realities of teachers and students. There was also the reality of students evaluating teachers. Evaluating teaching was the most tangible aspect of the project's work. Some administrators saw it as the essential key to perfecting the administrative machinery by which a decently high and uniform standard of teaching performance might be maintained. Others saw it as a part of the essential feedback which keeps a teacher honest and which gives specific guidance for developing skills. Some saw it as a threat, the students' way of getting at the professors, or linked it with accountability as part of a pattern of public repression.

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At least two professors, one in English and one in sociology, thought that I should be fired. The first one's letter described "the modern Ph.D. as one of the most rigorous and demanding intellectual exercises to which the human mind is subjected." He objected to evaluation because it was a way of "compelling the scholar to become an expert in an unrelated field." Presumably that unrelated field was teaching, which the professor might be paid for but not be required to learn anything about. The second complainant wrote directly to the AAUP asking for my dismissal, specifically because he was upset about my claim that evaluation was what professors got upset about.

In many ways my experience with the project's work parallels common experiences with teaching. The more I have learned about the subject, the less effective I have become in teaching it. To those professionally interested in evaluation, for example, I can speak lucidly enough. But to almost everyone else, I go on too long, dwell on the details, get entangled in the complexities. The answer may be that one's subject is not all that important, that evaluating teaching is not important at all except as it may provide some leverage for improving teaching. If we learn something about effective teaching in the process, it can be put to work in trying to develop effective teachers. And since good teaching depends greatly on the environment in which teachers and students work, we need to pay attention to the details of that environment as well. I am not going to try to describe the project's attempts to pursue these closely related objectives. That has been done at some length in *Professors as Teachers*, and in the two monographs, *The Recognition and Evaluation of Teachers and Career Development of the Effective Teacher*. Rather, I am going to pick out of my experience those matters which seem to me now to be most important.

Taking Teaching Seriously

The first of these is the importance of taking teaching seriously. Taking teaching seriously involves the willingness to examine the particulars of teaching and the contexts in which teaching takes place. Neither gets examined strenuously. The opinions of chairmen, deans, colleagues, and students, and probably in that order, are the prevailing sources of information about teaching. The procedures for making judgments lean toward informality and privacy in which few participants have first-hand information. Teaching occupies a respected place in the trinity – teaching, research, service – which roughly defines a professor's competence. But on almost every campus I visited, teachers distrusted the institution's official pronouncements about the importance of teaching. Many institutions do not take teaching as seriously as they should, do not consider it a high art but consider it an acceptable practice covering a great many students within a vast system. I think there have been some recent changes in respect to all of these. More departments are gathering data systematically and from more informed sources. Procedures are becoming more formalized and less clouded by an insistence upon confidentiality and privilege. Institutions seem more willing

to adopt more flexible ideas about faculty competence and to try to set forth with some honesty and precision what is expected of individual faculty members.

Still, no one questions the premise that any group of professors and students could do a better job of evaluating teaching than is now commonly being done. The project's attention to student evaluation of teaching largely reflects the lack of data from other sources. Student opinion, gathered in careful ways, is an essential source simply because students are the ones teachers are trying to affect and are the only ones who look at what teachers do day after day. Though their vision is admittedly limited (though in this respect probably less distorted than the faculty's), they have more acquaintance with the wide range of activities which make up a professor's teaching than any other source. The squabbling about the propriety of students rating teachers is at the root of it an unwillingness to recognize essential characteristics of teaching: foremost, that teaching is an open and an interacting process. The question of whether student rating instruments are valid and reliable is an admission of failure to examine the evidence or to be moved away from the faculty's prejudices. The fear that student evaluations will favor the popular teachers and discredit the dullards arises out of pedagogical anxieties and vanities unworthy of a good teacher.

All of this comes together within the reward system which everyone acknowledges is out of whack whether measured by the size of athletic budgets or the dominance of grantsmanship. As regards teaching, the simplest and most honest thing to say is that those things which give colleges or universities prominence in the world, the individual prominence in the discipline, have first claim on the rewards. Teaching does not rank very high among them. Nevertheless, we accept the condition because colleges and universities provide a reasonably comfortable place for those who spend their time there. Perishing is about as gross an exaggeration of what happens to unpublished professors as publishing is a gross exaggeration of the worth of much of what the system forces into print. We accept the reward system and its crude measures of the worth of scholarship and teaching because the majority of the academic community are not willing to go to the trouble of taking teaching seriously, or, perhaps because down inside they are afraid of the results if they did.

Hostility to Teaching

Second, teaching on every campus must compete for the faculty member's time. Take, for example, the conflict between teaching and research. The subject still arouses hot debate, most often in disregard of the simplest of facts. There is always a conflict between research and teaching as there is between reading books and writing them, between being in the library and being in classroom. Teaching and research are, in a general sense, complementary activities; in very specific ways they are conflicting activities. Official platitudes about the value of both will not alter these conditions. Some things which might reduce the conflicts are recog-

nizing (1) that the conflicts are greatest outside the sciences and at the lower levels of university work; (2) that research is only one kind of activity that attests to scholarly or creative competence; (3) that research commonly produces more measurable results than teaching; (4) that the measures and procedures we use to judge both teaching and research are not very accurate; and (5) that it is better to revise institutional expectations than to keep upholding the all-American scholar-teacher – virtuous in all directions – as a single standard. Having said these things before to little effect, I see little real chance that attitudes toward teaching and research will change very much. Research is above all a vested interest and will remain so as long as knowledge is regarded as a commodity.

As a related problem, consider the place of research and teaching assistants. Research assistants do actually assist in a professor's research, though some may be washers of test tubes and keepers of closets. Few teaching assistants assist a professor in teaching. If they assist anyone, it is the university, which responds by exploiting them. But, of course, assistantships provide jobs for students who could not otherwise afford graduate work which could not otherwise afford professors who could not otherwise move our civilization to ever higher levels of material and spiritual well-being. Surely that is reason enough for keeping the assistantship system and for keeping assistants in their place.

Somewhat more innocent examples of the professoriate's attitude toward teaching arose from other visits. A fair number of professors have asked me privately how an English professor got mixed up in this sort of activity. Some, it turned out, wanted to be similarly involved; others hinted at the dangers of taking on such a task. A few felt I was meddling. A young history professor at the University of Nevada burst out, "I know what you are! You're an educationist!" despite my impeccable credentials as a Doctor of Philosophy in English. On other occasions, individuals have come up to me after a presentation and said something like, "You know, you probably *are* a good teacher." The tone in which this was said is hard to describe. Surprise and suspicion seemed to be about equally mixed. It was almost as if a guest were to take the dinner hostess aside and say, "You know, you probably *are* a good cook."

It is puzzling why faculty members should be surprised by listening to a colleague who seems capable of teaching well, as puzzling as why so many faculty members look with disfavor upon teaching awards. The annual teaching award on many campuses has the effect of pleasing the person who gets it and alienating almost everyone else. At one major university, a political science professor passionately told me that he had been ruined among his colleagues by receiving such an award. The Danforth Foundation just this year dropped its Harbison Awards program, in part, I gather for reasons such as these. Were distinguished teaching really well regarded, surely it would have overcome these suspicions, and might have developed forms of national recognition as respected as rewards for research and creative work.

Teaching Ourselves

Much of my recent experience confirmed what the past had already impressed upon me, for example, that we professors are probably worse at teaching ourselves than at teaching students. "Having listened to papers being read at Modern Language Association conventions for a score of years," a professor of English wrote in a recent *MLA Newsletter*, "I am moved to cry, 'Hold, enough!' It has long been recognized that one of the least effective forms of teaching is the lecture; and that the least effective form of the lecture is the one which is read to its unfortunate auditors." The writer proposed, not the abolition of papers at professional meetings, but papers given in such a way as to increase the chances for learning. Alas, he has no more chance of stopping professors from reading papers at professional meetings than of stopping dog lovers from bringing dogs on campus.

Occasionally, I see signs of enlightenment. At the University of Missouri at Kansas City, a one-woman office acts as a gatherer and sifter and disseminator of useful information, for the administration, primarily, but also for the faculty. This one-woman operation costs less than any one-man department and probably does more good. That is not said in denigration of any department. It is recognition that faculty members and administrators will not, perhaps cannot, pick up very much of the constant stream of information, even about teaching and learning, which might favorably affect their practice.

It is a professional shame of a large order that no one sustains a bibliography on college teaching. With the support of the Southern Regional Education Board, Walter Crosby Eells compiled an admirable annotated bibliography on this subject covering the years 1945 to 1958. It continued on until 1967, when it was abandoned. No one has come forward since to carry it on, quite contrary to the fact that no scholarly discipline could operate without such basic means of making information accessible.

Busy-ness

Looking back on my own hurried visits to dozens of campuses, I am struck by how little leisure I found there. College teachers, like other Americans, accept being busy, and individuals are probably busy in some direct relationship to the level of position they think they occupy. Despite a popular belief that professors teach too little, I think many college teachers, particularly the young teachers, teach too much. A recent survey at the University of Utah arrived at an average faculty work week of 53.8 hours, with assistant professors putting in the longest hours. Most of that time involved being in the classroom or preparing for the classroom or taking care of student work growing out of the classroom. Teaching any one course well could take all of a teacher's time. The narrowness of specializations, the insularity of departments, the continuing domination of teaching by traditional structures and hours and grades and credits and lectures and routine performance can all be related to the necessity of just keeping up. Recent

years have made the task harder. University governance, which had been going reasonably well, threatens to fall apart; student unrest seems to have drained faculty energies; the shift from growth to retrenchment, affluence to austerity, has replaced one kind of busy-ness with another.

In my euphoric moments, I see some institution somewhere pushing everything else aside and spending some time with the wheels stopped before setting out on a simpler course. What might result would be fewer courses being taught in fewer departments by faculty members who for a decent period of time were firmly committed to teaching and were teaching in some way related to a knowledge of their students and of ways of reaching them. If trust replaced accountability, if the students did not change professors every 12 or 18 weeks, if the growth of self and colleagues and students replaced the satisfaction of seeing one's name in print, if common learning were pursued in collegial units of reasonable size, some of the busy-ness might be reduced. The trouble with such imaginings is that they run counter to institutional necessity and perhaps counter to human nature itself. The scatter-gun curriculum, the fragmentation of our efforts, may be necessary to the efficient functioning of a higher education that embraces the widest of aims for the greatest number of individuals. The acceptance of institutional patterns and teaching routines occurs because of the most persuasive of human reasons: it is easier than teaching well.

A Lack of Leadership

"It is hard," I wrote in one of my *Chronicle* columns, "to like an administrator. The objects of his ministration resent the necessity of being ministered to. And since most college administrators have been taken away from prior commitments to scholarship and teaching, the administrator himself often joins in the general disapproval (31)." Some degree of self-disapproval must underlie the lack of leadership among college and university administrators. Too often, college administration manifests itself in a harried carrying out of duties, a reluctant or clumsy use of the powers of office, and a want of imagination and energy to move out from behind the desk.

"Power?" the administrator says. "We have no power. The faculty has it, or the students, or the super-board, or no one has it." That, it seems to me, is a cop-out. Wherever I have found teaching to be receiving more than routine support, it has been because of intelligent and forceful administrative leadership. At the University of British Columbia when I visited there, the president was still teaching an undergraduate class and taking pride in having received a distinguished teaching award. At the University of Alabama, New College came into being because a president backed it despite faculty opposition. At Coe College, the president has made a remarkable impact on the academic program itself. At the University of Cincinnati, the new president seems to possess both a personal and literary style. How many presidents teach classes, could if they would, would to the exclusion of other demands on their time? How many keep closely informed about the academic program, propose and react to proposals affecting the actualities of

teaching and learning? How many write their own speeches? What do they say when they do?

Clark Kerr, one of the few modern presidents with a public identity, claimed that "Hutchins was the last of the giants in the sense that he was the last of the university presidents who really tried to change his institution and higher education in any fundamental way (50)." Fred Hechinger, writing in *Change*, asks the question, "Where are the intellectual leaders who stand ready – personally and precariously – to challenge the defeatist view that civilization has become too overwhelming to allow for any new academic blueprints? Where are the proposals for putting the terrifying puzzle together into some recognizable whole (41)?" To me, the "terrifying puzzle" is not only a matter of the complexity and disorganization of the modern world but of the definition and uses and values attached to the advancement and dissemination of knowledge. Where are the intellectual leaders asking such questions as these: How much of advancing knowledge in the past twenty years was more precisely advancing self and institutional interests? How much has advancing knowledge stood in the way of putting knowledge to beneficial use? How much has been put to use in destructive ways? How much modeling of a consuming society now threatening to exhaust its basic resources is predicated on the inexhaustibility of knowledge? How much arrogance grows out of a self-justifying pursuit of fragmented truths? It is not that answers to these questions will put all the traditional aims of higher learning in a bad light. It is that the questions are not being asked by men (there are few women college administrators) who might be expected to ask them.

The Graduate Schools' Responsibilities

At the very beginning of my time as project coordinator, someone told me that the key to improving teaching was changing the attitudes of those engaged in it. Commonplace as the remark is, it is probably true. Attitudes toward teaching shape and are shaped by a reward system which appears to place teaching below research, to prize specialized competence over general learning, to measure the worth of teaching by the general level at which it is practiced, and to base a teacher's worth on the formal credentials he possesses. These values rise out of basic beliefs about the advancement and dissemination of knowledge for which the graduate schools are largely responsible. The graduate experience is also the crucial experience in shaping the attitudes and values of college professors. For these two reasons, changes in graduate education are crucial to any consequential improvement of college teaching. Since Ann Heiss will be discussing graduate education at length, my concluding remarks will be very brief.

There is a grievous need for communication about improving teaching. A center such as the Northwestern Center for the Teaching Professions can provide the leadership that is needed to get this information into the hands of individuals, departments, and institutions which will inspire productive action based on the skill that we collectively possess. Hopefully, too, the Center will provide a continuity

of effort which can inspire other institutions to pick up where grant supported projects have left off, particularly when inspired by interested and committed individuals.

Unfortunately, to judge from the seventy or so campuses I have visited, leadership is not present in overwhelming quantities within the American college and university. This is ascribable in part, it seems to me, to the tremendous amount of activity going on. It often seems that those people who are willing to work on new programs tend to be those people already up to their necks in new programs. It becomes more and more obvious to me that changing administrative and faculty attitudes toward the improvement of teaching greatly depends upon changing the graduate schools. The Center at Northwestern could choose no better place to focus its efforts.

The graduate school, I think, is the last to feel the waves of change which swept through the campuses in the sixties. Surely the highest reaches of higher education should have anticipated and been more meaningfully involved in the racial and economic and political crises of the sixties. Surely graduate disciplines should have been aware of the circularity of their production – Ph.D.'s to train more Ph.D.'s to train more Ph.D.'s – before the realities of the job market brought it home. Surely they might have moved sooner and on their own to widen opportunities for women and racial minorities. Surely graduate schools should have been aware of what their booming success was doing to undergraduate education. Surely they should be more aware now of the necessary relationship between advanced study and purposeful and satisfying work. Surely graduate deans should have been among higher education's leaders instead of being the most inert of a generally inert mass.

I am not trying to end by heaping all responsibilities on the graduate school. But I am convinced that we cannot greatly improve college teaching unless we have graduate schools that take teaching seriously and that place the development of superb teachers among their foremost aims.

COMMENTS

Conference participants reacted to a number of key issues presented by Dr. Eble. While no one disagreed that teaching should be taken more seriously, a distinction was suggested regarding teaching as an art versus teaching as practice. The accent on individuals as needing different inputs, techniques, and evaluation countered the generalizations relating to the professoriate as a group. Of importance is the question, "What is expected of individual faculty members?"

The problem of evaluation of teaching provoked considerable discussion. The difficulty with this problem is finding a definition or frame of reference agreeable to all. A distinction was made regarding evaluation as a basis for rewards – tenure, salary, appointments, etc.; and evaluation for purposes of pedagogical improvement. Student evaluations of teaching performance were discussed with

mixed opinion as to their value. What do these evaluations prove? Again, references to individual students and to individual teachers weighed heavily. The contract system was suggested as a strong method for promoting individual assessment. (The contract system involves a stated, explicit agreement between a student and a teacher, or between a faculty member and a dean, which indicates expectations, probable accomplishments, and a system for assessing both in light of performance.) This would limit the need for comparison of teachers or for dealing with the extreme examples of good and poor teaching.

The criteria for measurement of good teaching was examined with several in agreement that most evaluation procedures presently do not show a relationship of teaching to learning. It was suggested that by concentrating more on learning, a proper criterion for evaluation of teaching would be possible. In the interim, present evaluation techniques, including student evaluations, could easily be altered to be more reliable and relate more specifically to the individual professor.

Participants discussed Professor Eble's point regarding hostility to teaching. There was no disagreement about the opinion that teaching and research are complementary, yet it was acknowledged that time demands on faculty make it difficult to teach well and to do formal research at the same time. Some placed the guilt on faculty members for not reordering priorities while others felt institutions were placing demands on faculty members which resulted in negative attitudes about teaching as a high priority. Specific disciplines were cited as having different problems in dealing adequately with both teaching and research thus making it difficult for some disciplines to develop a positive reward structure for both. Teaching at the undergraduate level as compared to the graduate level presented additional problems with respect to instruction and research. It was agreed, however, that good researchers are generally good teachers.

The problem of a lack of information on teaching was suggested as a roadblock to encouraging innovation in teaching. Professor Eble recommended a National Center for Teaching as a means of disseminating information on teaching and evaluation. Such a center would not exist solely to do research on teaching. The opinion was expressed that information about teaching is already available in numerous publications, with this available information having little impact on change. Getting the job done, in the estimation of one discussant, was not through printing information and making it available, but rather in pursuing change at the institutional and faculty level. It was pointed out, however, that very little reliable research and printed material presently exists on teaching. Teaching, unlike research, is more difficult to define and explain with regard to diagnosis and evaluation.

Another question concerned the lack of continuity in innovations in teaching. It was generally felt that the wheel must constantly be re-invented. While some indicated this had its benefits for the individuals involved, it did represent an unnecessary use of time. Here again, a clearing house on instructional information could provide some continuity. Also funding sources, foundations and

the federal government, were thought to place unrealistic goals for institutions with regard to instructional improvement efforts. Too many national projects have built-in time periods, and the nature of the project provides for no self-sustaining mechanism. The result often is a termination of efforts before the tree begins to bear fruit.

The old argument of what constitutes good teaching also was discussed in light of Professor Eble's presentation. Some felt his paper assumes that agreement exists concerning what is good teaching. While Eble agreed that individual differences did exist, he said there are recognizable dimensions of good teaching about which there really is not too much conflict. Though the presentation was convincing for putting this argument to rest, some felt the need was not one of emphasis on techniques and instructional innovation, but one of looking at professors and students more as human beings; i.e., one is either a "live" or a "dead" teacher.

With regard to the major factors influencing instruction mentioned in the introductory article, Professor Eble's presentation and the lively discussion which followed touched upon a number of these factors. Conspicuously missing were references to tenure, the degree system, accreditation, and outside influences on teaching. In short, the perspective largely represented an institutional point of view, more particularly that of a faculty member.

IV. GRADUATE EDUCATION IN TRANSITION

*Dr. Ann M. Heiss**

The fate of the graduate and professional school in the United States is a matter of grave national concern and consequence. In the long arch of history the promise, performance and progress of nations have been inextricably interrelated with the promise, performance and progress of their institutions of higher education. Nowhere is this truer than in the United States where a democratic form of government provided the freedom and support that enabled its universities to emerge, in less than a century, as among the finest in the world. To an appreciable extent programs of graduate study and research made this emergence possible. It is on the quality of this segment of education that the quality of all other educational efforts ultimately depend. For, as the teacher of teachers, scholars, professionals, state and national leaders in every facet of industrial, business, or social activity – our graduate and professional schools have played a vital role in forming the essential character of life and living in the United States.

The willingness of the people to underwrite the educational development of its gifted has been responsible for the prestige the United States enjoys in the world of ideas and for the progressive improvement of the educational opportunities available to its citizens. In the scant one hundred years since their formal organization, graduate schools have returned the nation's investment many-fold.

During each stage in its development the United States has had to overcome monumental problems of a social, political, technological or scientific nature. Many of these have been successfully surmounted. Others remain partially or wholly unresolved. And many new and more complex problems have arisen. Because many of the latter combine problems of national survival and human well-being with rapid societal change, capable people at all social levels must now be recruited, motivated, and supported toward study at still greater levels of complexity. While the need for scientists and technologists remains high, the need for scholars and competent others who concern themselves with human values and their alternate choices is cogent. Graduate schools today must make greater efforts to balance the competing demands of science and technology with the demands of the humane disciplines if they are to respond to the needs of tomorrow and the days after tomorrow.

The magnitude of the national effort required in response to current pressing social problems may be as great, if not greater, than the research efforts evoked for the nation's political goals and purposes. If the traditions of the past hold,

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the nation will support that effort. If that tradition is disregarded, graduate education and society will suffer irreparably. To be unaware of that tradition and of the accumulating energy and gathering historical forces which led to the development of graduate education in the U.S. is to deprive oneself of a valuable perspective. Sarason (75) observes that "history is something all organizers of new ideas and new enterprises should be aware of."

An Historical Perspective

Private, state and federal interest in graduate education dates back to the 1780's. As established private and public institutions added programs of graduate work, they accepted the American practice of organizing scholars into disciplines or departments as analogous to the German practice of organizing research institutes in which a professor served as the director and the instructors and graduate students served as his assistant. Thus, as degree programs were developed in this country, a graduate faculty was attached to an existing department which then became the administrative unit for both undergraduate and graduate work. The American graduate school was formed by the superimposition of the essential elements of the German university, on an undergraduate structure that had been borrowed earlier from the British residential colleges (16; 47; 72).

Almost overnight the research function in graduate education overshadowed the teaching function and became an end in itself instead of one of the means toward an integrated program of instruction and training. In the interests of national security and the scientific preeminence of the nation, graduate institutions were asked to involve themselves in research projects that often proved to be totally unrelated or antithetical to the educational purposes of the graduate school. By 1959, the human and humane interests of university researchers – which were epitomized in their desire "to make human want obsolete" had been extended by spokesmen who urged that universities accept massive federal research support ". . . because of the nation's overriding need for food, energy, health and *defense* (11)." When universities accepted that responsibility, irreversible forces were set in motion which affected the nature of universities, altered their capacity to teach, established new university hierarchies, changed their financial status, promoted powerful new political relationships and changed the nature and organization of research from reflective, individually pursued "sealing wax and string" research to experimental team research which required instrumentation on a massive scale (51; 83; 84).

Research and the researcher became highly prized and valued on the university faculty. Research soon gained ascendancy and a privileged place in academia. Few such encomiums were directed to advance or uphold the teaching role of the faculty. As research activity escalated – and enrollments in higher education climbed – the drain of experienced instructors from the teaching function became a matter of paramount concern – especially at the undergraduate level. Professional associations whose members were responsible for teaching, did little to

protect the status of teachers and were virtually mute about its downgraded position. The scholarly journals and conference themes of most professional societies testify to the interests of their editors and executive committees in making their research scholars visible. On the assumption that the reflected glory of productive scholars would give prestige to the discipline, professional associations became increasingly more self-serving.

In failing to be objects of study to themselves, many associations were ineffectual in projecting trends, identifying weaknesses or determining the broad educational needs of their future members. The professionalization of the student – in which the major goal was to transmit the knowledge, skills, ethics and ideals of service in the profession – was, in some cases, replaced by packaged programs for educational "certification." As professional societies became more and more discipline-serving, their educational requirements became more and more rigid, routinized and ritualistic. Many had become so depersonalized by the late 1960's that their national conferences were disrupted by students who called for new attitudes, new approaches, and the reaffirmation of a commitment to the service of those who needed, or could use, their expertise.

Coupled with these demands was the demand for better teaching and for graduate preparation for teaching. A number of professional organizations responded by setting up commissions on college teaching (Physics, Biological Sciences, History, Math), and the American Association of University Professors defined a new role for itself by supporting a Project on the Recognition and Evaluation of Teaching which Kenneth Eble successfully directed.

Historically, while federal agencies promoted the research interests and goals of the graduate school, national educational organizations such as the American Council of Education, the Council of Graduate Schools and the Association of State Colleges and Universities, and concerned philanthropic societies, such as the Danforth Foundation, the Woodrow Wilson Fellowship Foundation, the Carnegie Foundation for the Advancement of Teaching and the W. K. Kellogg Foundation, have sought to improve and strengthen the instructional interests and goals in graduate education. The support of these organizations for the education of those who have a commitment to college or university teaching has done much to focus attention on the need for better preparation during the doctoral program. The work of the several United States Office of Education Research and Development Centers has produced the research base on which the development of better teaching preparation and in-service improvement programs can be designed. Of particular importance is the work of such recently established units as The Center for the Teaching Professions here at Northwestern University, the Center for Teaching and Learning at the University of Michigan and the new Center at Stanford University which plans to focus on the improvement of teaching and of teaching environments.

In the almost total lack of middle leadership on the issue at the graduate level, it was the graduate students of the mid-sixties who promoted the reinstatement

of the teaching status and demanded that the university assume its obligation to offer preparation for teaching to those who planned to enter academic careers. Viewing themselves as consumers who had been short-changed in their doctoral programs, university students nationwide expressed their demand through departmental petitions, student unions, collective bargaining agencies and through such professionally addressed publications as "The Graduate Student's Revolution Kit" which was developed by physics students in attendance at the Lake Wilderness Conference of the Commission on College Physics in 1969. The theme of the conference was, "The Missing Component in Graduate Education." Students from the major universities in the nation were quick to identify that missing element and to document the need for new approaches to the graduate student. The central focus of the students' representation was for the revitalization of the mission of teaching, the liberalization of the curriculum, the need for alternate degree patterns and, most insistently, on the need for the instructor who, in the tradition of Kahlil Gibran " . . . gives not of his wisdom but rather of his faith and lovingness . . . . (who) does not bid you enter the house of his wisdom, but rather leads you to the threshold of your own mind (39)."

The theme of individual fulfillment, or the need for a more personalized and humanized graduate experience is pervasive throughout the whole history of graduate students. Because this theme is expressive of the needs of men and women in the larger society it bears special consideration for those who plan graduate education today. In the past, when discrepancies arose between the student's expectations of graduate education, and the reality he encountered, he accepted them passively. More and more of today's students charge that the touted collegiality of the university is lost if no one is interested in the choices he makes with respect to his goals, or if the department limits its efforts to his development in the discipline but eschews responsibility for educating him for *being a human being.*

A review of the types of courses that students designed for themselves, their professors and for community leaders in the SWOPSI program at Stanford (Stanford Workshops on Political and Social Issues), indicates that students believe that graduate research must forthrightly begin to address the issues of peace, human initiative, environmental health and the myriad of concerns among men and women today. They argue that the university fails in its essential mission if it circumspectly avoids or is disinterested in the question of value.

Smelser (77) has suggested that as graduate disciplines took their bearings from the "scientific impulse" and isolated students from the "grand ideas" that the pursuit of a Ph.D. formerly provided, a preoccupation with theoretical elegance, empirical evidence and technical canons – even in such fields as literature, art and music – intruded on basic philosophical concerns of earlier scholars whose work was often discounted on the grounds that it was "unscientific."

Recently, cleavages have developed between those who promote rigorous emphases on scientific methodology and those who believe that the discipline should

be concerned about the social, moral and political problems of contemporary society. This cleavage is also apparent between students who look to education for a broader meaning to the careers they are pursuing and professors for whom the extension of knowledge in the discipline is a primary goal.

Many of the fundamental problems of graduate student development today have their origins in the attitudes and behavior of the faculty and in the basic structure of graduate education which, at least until very recently, has tended to create an authoritarian rather than collegial relationship. The mark[illegible]he Germanization of the American graduate school are still apparent in the organization of research around senior or tenured faculty, in the degree requirements, the examination system, the rigorous insistence upon "original" research and the rituals in the process. While the model serves the need for productivity in research – there is more than presumptive evidence that this attitude or approach has led to conformity, to lack of independence and spontaneity and even to regression in the intellectual motivation, development of creative ideas and quality of output among graduate students. The data on the subsequent research productivity of Ph.D.'s support this charge in many instances (17).

In some institutions, the personalization or depersonalization of graduate study has resulted from the size of the enterprise. Efforts to decide on the critical mass for any given department have not always been carefully planned and, as a result, some departments or institutions are over-saturated with more students than they can possibly treat individually, and other institutions or departments attract so few graduates that opportunities for interaction with informed and interested others are sparse or lacking in quality. At the moment, some of our best graduate schools are in danger of having less than a critical mass. Faced with serious cutbacks in graduate student support, Harvard reduced its graduate admissions from 850 in 1967 to approximately 450 for this current year. Other major universities have done the same. At Harvard and elsewhere this might lead to more individualized learning at the graduate level but it has serious consequences at the undergraduate level where graduate students who aspire to teaching careers have traditionally served as instructors or tutors. This reduction in the best schools also creates a situation in which sub-minimal institutions can fill – or stack – their student rosters. Before this trend goes unchecked, there is urgent need for research on the capacity of individual institutions or departments to offer quality programs, adequate academic supervision and other necessary forms of graduate counseling.

One of the major areas of reform and innovation at the graduate level is in the development of the Doctor of Arts degree for those who have an interest in becoming undergraduate teachers. Many faculty members have begun to accept the fact that preparation for research and preparation for teaching require distinctly different skills. On the premise that research is, fundamentally, teaching oneself, and that self-teaching presupposes a receptive, goal-centered and disciplined mind ready-to-learn – whereas teaching is the evocation of someone else's disposition to learn, coupled with the ability to transmit knowledge to others (activities that re-

quire more skill than does self-teaching) – many graduate institutions are in the process of developing a Doctor of Arts degree program in which the theories and skills of teaching are given a major emphasis. After long discourse and defensive argumentation, designers of the D.A. programs focus on the educational, philosophical and psychological rationale for such a degree and leave the question of its status-conferring character to those who worry about rank.

The pressure for improvement in the quality of college and university teaching, and the development of the Doctor of Arts degree, have motivated many universities to strengthen their Ph.D. programs by including seminars, course work and supervised practicums or internships in college and university teaching. On the theory that effective teaching preparation resides in the capacity of the faculty and the students to learn from each other and to be both engaged in the process of becoming better teachers of themselves, graduate students and faculty members find new challenges and excitement as they exchange ideas and impressions about teaching and teachers. The use of videotape, films and other forms of instructional technology add substance to the discussions and offer means through which self-development can be achieved.

The Graduate School Today

A profile of the graduate school in the United States today shows it as a multi-purpose component in the nation's higher education effort. Its primary educational purposes are the preparation of scholars in the arts and sciences, and the education and practical training for persons in a wide variety of professional fields. Instrumentally, this involves the institution in the preservation and transmission of the cultural heritage – which it strives to perform through its instructional programs; in the advancement and discovery of knowledge – which it fosters through its research activity; and in community service – which it offers in a wide diversity of forms and fields. The latter include public lectures, forums, conferences and institutes on substantive issues or problems, extension course work or workshops, programs in the performing and fine arts, advising and consultation, and similar other intellectual activities that extend the university to the community or bring the community to the campus.

Interaction between the graduate school and the larger society are markedly enriched where there is mutual understanding of each other's purposes and sensitivity to each other's needs. Problems have occurred when demands were made by one, that were inappropriate to the purposes, function or capacity of the other. When the graduate institution brings its competencies to bear on social problems, it serves not only as a critic of what is, but in some cases, as an advocate of what might be. Thus, both the educational institution and society are beneficiaries. When capricious, non-intellective or self-serving demands for services are made on the university, it is in the interest of the academic institution *and* society that such demands be refused as inappropriate to the purposes of graduate education and study.

The graduate school is not a consenting institution. Its essential nature is sustained and its value to society is safeguarded by the fact that it is free to question, to extend, to modify, to dissent from, or to discard existing ideas, norms, beliefs and values on the basis of demonstrable evidence. Although it depends for its existence upon the sufferance of the state, which it must sometimes criticize, the autonomy of the graduate institution in America has been traditionally sustained and upheld. Freed from the ideological constraints that plague many foreign universities, the faculty, graduate students, and alumni of American graduate schools have been able to produce an estimated 80 percent of the world's basic research over the past three decades (79).

As a result of its demonstrated worth, the graduate school in America is valued as a center for intellectual activity, and a place for free inquiry and criticism – including self-criticism. It is an institution which strives for unity not unanimity: to be active, not merely reactive; assertive, not merely defensive; objective, but not wholly detached. In matters involving the human condition the purpose of graduate education is to prepare individuals who submit reason to caprice or emotion, yet couple that reason with feeling and commitment. As an institution purposively dedicated to the search for truth, the graduate school must learn to live with ambiguity. Its task is to live with it tolerably and to teach others so to live. Although it is committed to preserving and transmitting the cultural heritage that enables individuals to identify with their forbears and with one another, the graduate school is obliged to expose the myths, fallacies, superstitions, taboos and general weaknesses in that heritage.

In pursuit of its essential purposes, the graduate institution invariably finds itself in some state of conflict, crisis, confusion or disorientation. Given the mission of the university, these states rise internally or may be diffuse in the larger society. When they arise *internally*, the dynamic generated by scholarly debate and discussion can often lead to constructive resolution or innovative regeneration. When the conflict involves some public issue, the role of the institution has generally been limited to that of analysis. Although valuing pluralism in the world of ideas, the graduate university has usually maintained a position of corporate neutrality on public controversy – except in extreme cases when a position of neutrality might jeopardize the general welfare or be counterproductive to higher education.

Prior to the 1900's, the mind of man reacted without great strain to changes in society because change came gradually and was usually without explosive force. However, the rash of social changes evoked by the Industrial Revolution required the mind of man to make a quantum jump. In the process, the beliefs, values, norms, relationships and self-identification his education had inculcated required comprehensive alteration. As contemporary society attempts to come to terms with the change phenomena, it finds itself confronted not merely with alterations but with such aberrations as a drug culture that is self-destructive, an activist culture which, in some cases, condones violence if it serves as means to an end, a

youth culture in which a strong penchant for self-identification and independence is characterized by alienation, anomie and aimlessness, and a variety of ethnic and minority cultures in which the themes of discrimination and injustice have led to cynicism, or a lack of faith in educational and other social institutions.

Serious scholars note that the United States appears to be in transition from an industrial to a post-industrial society. They believe that although science and technology will play a large role in shaping that society, a major educational effort and research quest must focus on the social problems of mankind. This will require that scholars in all fields go beyond definition and discovery to find implications in their research that will point toward the resolution of the human and moral problems of the nuclear-space age. Without denigrating the importance of the quest for knowledge that has intrinsic value – for it is the latent instrumentality in intrinsic knowledge that makes it valuable to the researcher, however long the time lag – the new needs underscore the importance of intensifying the search for the kind of knowledge that can aid in the realization of a more just, happy, healthy and culturally diverse society. To restore a sense of trust in educational institutions, graduate schools must re-humanize their approach to the development of future scholars and leaders by offering education that resonates both a social and moral concern for the problems among youth and in society.

In the history of civilized man, each new age has made attempts through education to come to terms with the human and moral problems it generated. Unlike the pre-industrial period, which represented an almost unbroken sequence in its style of education, the dynamism of history in the 20th century has immensely complicated that effort. Since the turn of the century, new and sometimes explosive "ages" have appeared only to be superceded by a newer one within a decade or two. Pressured during the 40's, 50's and 60's by an avalanche of demands for access, for educational specialization, and for an emphasis on research in science and technology, the process of preserving, transmitting and advancing the cultural heritage lagged in the university. The challenge of the 1970's is to restore and to add a new chapter in our heritage of "the knowledge that is most worth knowing."

The role of the teaching professions in that effort needs no elaboration in an audience such as this.

Role of the Graduate School

In a conference on "The Improvement of Teaching in Higher Education," it seems appropriate for the conferees to consider, "What is the role of the graduate school in that task?"

In the hope that they might form a basis on which rational discourse might begin in this seminar, I would like to offer a number of propositions with respect to the new directions, new attitudes, and new challenges posed for those who, like you, have a deep concern for the future of our graduate and professional institutions. For the most part, the propositions focus primarily, although

not exclusively, on the role of the graduate school in the preparation of those persons whose future careers involve teaching as a primary role or as an associative professional responsibility. That is to say, on the preparation of college and university teachers, of clinicians and other personnel associated with health care, and of professional persons in a wide variety of people-serving fields such as social or community services, law, the ministry or public administration.

As society becomes more complex the educational role becomes of increasingly greater importance.

According to Sarason (75), Kahn (48), Drucker (29), and Brezenski (15), and others, more change has occurred and more enterprises, ventures, organizations and societies have been developed in the past two decades than in the entire previous history of the human race. Studies show that 75 percent of the new ventures fail within the first five years due to: (1) inadequate knowledge and understanding of the organization's ultimate goals and values, (2) incompetence, and (3) the need for more adequate reflection and calculation.

Futurologists expect that by the year 2000, society in the United States will be as different from society as we know it today as that society is from the most primitive village in the underdeveloped regions of India. These same authorities suggest that given the potential for change in our technostructured society, the U.S. may change from a market economy to a service economy by the 21st century. If that occurs, the dominant institutions will be intellectual – universities, research corporations, and laboratories – and political. State and federal agencies will be formed whose role will be to bring the expertise of the intellectual centers to bear on the problems created or left unresolved by the industrial society.

If these projections are correct, serious intellectual efforts should be made now to prepare the kinds of programs that will be required. Some observers believe that the social and political science disciplines will join the humanists in greater numbers in the effort to reaffirm the role of the individual in a technetronic age. They suggest that universities will have to redouble their efforts to serve the interests of a culturally diverse and more leisure-oriented society lest a self-serving power base "program" interests that are inimical to the individual's social or civil rights or to his moral and aesthetic values.

Changes in society, in the academic disciplines, and in undergraduate education dictate the need for change in the structure and content of graduate education and for better articulation at all levels.

Although current challenges to graduate education spring compellingly from the current economic realities in higher education, the long range challenges to our graduate and professional enterprise spring more compellingly from changes in the nature, values, beliefs and structure of contemporary society, from additions in the substance and modifications in the organizational relationships among academic disciplines, and from the movement at the undergraduate level toward individually designed or "contracted" programs of study, non-traditional

teaching and learning patterns, rearrangements in the time, place, and manner in which degree requirements are rationalized, shorter – or longer – time options for earning degree credit, interinstitutional programming, the development of external degree opportunities, community-based practicums or work-study activities, independent studies, field work, student-initiated courses and a host of other innovations that have been approved as educationally sound.

Characteristically, students who opt for institutions that foster such innovative approaches to education also opt for graduate or professional education (9). If those who plan graduate and professional education are not *au courant* with undergraduate trends, the charge by respondents in a recent student survey – that approximately one-third of their graduate experience was wasteful because it was repetitive of their undergraduate education – will continue to be heard.

Among the most significant challenges to which graduate planners must respond are the changes in today's graduate students.

In the long run, changes in students may have a greater relevance for graduate planning than any other variable. These include changes in life-style, autonomy, experience, age, cultural background, major field of interest, career plans, degree of motivation, self-concept, financial dependence and independence, sex, talent, community involvement, personal obligations, work values, and expectations of the graduate or professional school. Research on the career choices and expectations of college seniors of tomorrow indicate that the student today demands more from his educational investment than did his counterpart in the past. Studies by Astin (4), Astin and Panos (5), Baird (9), Henry and Dienst (44), Pace and Milne (68), Creager (24), and Gregg (40) show the scope of the goal changes among recent students.

In projecting future directions for graduate programming, enrollment and registration changes at the undergraduate level provide useful information. Currently, undergraduate students are moving into new fields (and out of old ones) in increasing numbers. Just as students flocked into the physical sciences and engineering on the basis of the well-publicized national needs of the post-Sputnik period, they are flocking today into health and ecology-related fields on the basis of personal and national needs in the decade ahead. Other people-helping fields such as law, medicine, social welfare and psychology are also attracting increasing numbers. Additional predictors of future changes may be noted in the substantial increase in the number of women who are preparing to enter or are beginning graduate education and in the increases in the percentages of minority group students.

Institutional responsiveness to these recent shifts in the interests of students, and to the renewed national awareness of different man-power needs, is as yet inconclusive. However, there is fairly reliable evidence that at the graduate level academic programs are becoming broader and training for research is now more interdisciplinary in character. This trend is partly in response to the changing structures of knowledge and to the increased activity at the interface of related

disciplines. An equally important rationale for broader programming is the graduate school's interest in checking the trend toward such narrowly specialized education as characterized the space sciences in the 1960's.

Assuming that present needs and trends will continue into the 1970's, graduate schools and federal agencies are reviewing and revising their plans for offering and supporting graduate studies. In particular, they are attempting to formulate policies which will avoid wasteful "crash" programming or the protracted degree process that characterized many Ph.D. programs in the past. To avoid either of these situations, special attention is being given to the diverse interests, abilities, commitment and needs of the individual who applies for graduate admission. If his commitment and needs are limited to gaining supplementary, updated, or broader knowledge in his undergraduate field, it is no longer assumed that he needs a graduate degree. On the other hand, if he expresses a commitment to, and demonstrates an ability in independent scholarship and research, some graduate schools are redoubling their efforts to help him to achieve that goal as expeditiously as possible.

By establishing a system which rewards research productivity above teaching, graduate institutions created social distinctions which mock the concept of the academic staff as a community of peers and presented conflicting models for the graduate student. Current efforts to correct this disparity need the endorsement and support of leaders in graduate education.

The over-arching effect of the differential reward system on the graduate student who seeks to develop his academic career goals is to diminish the clarity of his aspirations to gain teaching competence. He may be unhappy about this but his need for recognition at this stage may force him to play down his interest in teaching. Research by Miller and Brown (61) indicated that only 10 percent of the teaching assistants in their sample believed that their teaching performance would be of importance in their department's over-all assessment of their competencies. Conversely, practically all believed that their performance as research assistants would be important.

The graduate student whose personal choice is to develop research and teaching competence often finds himself in conflict in an ethic that places high value on research and gives scant recognition to teaching. If he values teaching, his commitment to scholarship may be suspect by the graduate faculty which is largely influential toward his future. If he applies the values of his research-dominated specialization in his undergraduate teaching, he invariably recognizes that he has distorted the goals and purposes of education at that level.

The recent cut-backs in research support may have the effect of creating a "flight back into teaching." To prevent new confrontations that might be destructive, universities should equalize the reward system especially with respect to the recognition given for teaching.

There is a need for continued study and refinement in the methods used to evaluate teaching.

Many of the special characteristics that comprise effective teaching are measureable but the mechanical approach to the assessment of graduate teaching whereby units of "good" teaching are prescribed is unacceptable and unreliable. To think in such qualitative terms is to short-cut the evaluation process. The only usable criteria for evaluating teaching at the graduate level are those that reveal genuinely creative and vital thought and the ability to transmit the nature and spirit of that thought to others.

Graduate and professional schools should adopt admission policies which lead to planned diversity in their student bodies.

To those who wish to grow in what it means to be human, it has become increasingly evident that an understanding of others and their cultural heritage is the beginning of wisdom about oneself. Within the past few years institutions of higher education have made efforts to redress the imbalances in their enrollments of ethnic minority and women students. Graduate and professional scholars bear heavy responsibility in the furtherance of this effort. To equalize educational opportunity and to assist in the development of scholars and other leaders from these groups, graduate and professional schools should actively recruit among the "New Students" at the undergraduate level who reflect this diversity.

The faculty in graduate and professional schools should represent a diversity of ideas, competencies, and values rather than a single school of thought.

In graduate and professional education there is obvious need for the essentialist who believes that there is a specific body of knowledge to be taught and learned, that human nature is relatively the same in every age, and that history and experience have some things to teach; and also for the existentialist who has developed a tolerance for ambiguity, is concerned about the present and future more than the past, views both knowing and valuing as facets of the learning process, and adopts provisional or improvisational methodology in the search for knowledge. There is also a need for those who concern themselves with the production of fundamental or intrinsic knowledge and for those whose goals indicate a concern for the instrumental value of their teaching and research. Finally, there is a special need for innovative leaders who have sufficient philosophical scope to evaluate the strengths and weaknesses of both sides and can blend their complementary features.

The graduate institution today looks upon a world in which change is constant. One tenet which must be observed in the organizational adaptations planned for its future is that all irreversible decisions be kept to a minimum. To this end, ad hoc, temporary arrangements for establishing priorities, allocating and re-allocating resources, or testing new theories of graduate education and research should be made available and subject to periodic review.

Although there are external signs of considerable homogenization in the character of graduate schools, there is widespread diversification underway internally.

Hodgkinson's (45) suggestion that institutions of higher education are tending toward homogenization rather than distinctiveness does not reveal the extensive

interaction that is occurring within and between disciplines at the graduate level. Prompted by the successes achieved in collaborative or team research, scholars have begun to plan joint seminars in order to exchange students and to open new channels of communication even in the traditional fields. Some faculty members find more stimulating research interests at the interface of several disciplines than they find within the boundaries of one discipline. Many of these relationships are informal but in some cases they have developed into new academic programs or joint inter-disciplinary degrees.

As the supply of Ph.D. recipients comes into balance with or exceeds the demand for specialized talent, some disciplines have surveyed other types of career opportunities that might be open – or opened – to their students, e.g. physics, space sciences, engineering. Others have begun to broaden the base of the Ph.D. program to avoid the over-production of specialists in fields where generalists or interdisciplinary persons are now being sought.

Interdisciplinary programs – of which the Institute at Columbia University, the Problem-Centered Study and Research projects at Harvard, and the Field Studies Programs at Berkeley represent only a few variants – serve a number of teaching and research functions. In addition to relating scholars who benefit intellectually from the knowledge that passes from one another, new instructional methods are being developed, new teaching media and materials have been assembled and study climates are developing in which reflective, disciplined learning and the continuous "polishing of one mind by another" can be found.

Technological advances alone are not likely to resolve the problems of a complex society just as the drift toward specialization in the humanities has failed to provide insight into the question of values to which the humanities, in the past, have addressed themselves. Societal problems – whether they concern "people problems" or "nature problems" will require a combination of talents and skills not ordinarily associated with a single discipline.

Organizational arrangements that are facilitative and meaningful with respect to the mature individual who wishes to develop himself along cross-disciplinary or multi-disciplinary lines are becoming available in major universities. As they search for new directions in research and teaching, graduate schools can demonstrate the fact that science and technology can be instrumental in reducing many of man's inhuman burdens. Additionally, it can demonstrate that knowledge in the humanities, and in the social and behavioral sciences can provide insight into the means through which man can avoid such burdens in the future.

Stepped-up interests in the use and development of the new instructional methods, media and materials provide a basis upon which Centers for Teaching have attracted some of the best minds in higher education for the purpose of advancing the quality of college and university teaching.

To avoid the errors made by research centers in which the faculty and students were inclusively socialized to research, Centers for Teaching should provide an environment in which both teaching and research are valued intrinsically

and are mutually respected. Such an environment should be conducive to the free exchange of new ideas, tolerant of diversity in academic goals, educational philosophy and teaching style, and be committed to the revitalization of instruction and to the restoration of "joy" in teaching.

COMMENTS

Dr. Heiss was optimistic about the changes in graduate education which reportedly are taking place and are designed to help solve some of the thorny problems associated with teaching. This optimism was not equally shared by all participants. The point of teaching versus research received additional concentration. The data supported the notion that good teaching and good research go together. It was emphasized that some institutions now are rewarding good teaching as well as good research. Whether graduate schools are dynamic in promoting good teaching remained dubious.

As for the evaluation of good teaching, it was pointed out that a great amount of ambiguity exists. It is difficult to measure who is a good teacher or what constitutes good teaching. Some indicated that this difficulty reflects a difference in goals of students and faculty. Furthermore, graduate faculty are fearful of evaluation on the basis of teaching. This was felt to be partly a result of the socialization process of faculty members as they go through graduate study, the success of which is based upon discipline competency. This fear of evaluation and defensiveness about teaching, however, was not felt to be a lack of interest in teaching. Are graduate faculty interested in teaching? Can the socialization process be overcome?

There was discussion regarding Dr. Heiss' concern about what implications the changes taking place in undergraduate education might have for graduate education. Undergraduate education trends were described as a movement away from discipline based study toward interdisciplinary study and an approach to the student as a person. From this frame of reference content and learning become a means for determining the student's self-development. This was viewed as opposite to graduate level training with its emphasis on achieving competency and knowledge within a specific discipline. The feeling was that students entering the graduate school would be dissatisfied with the traditional learning mode and unwilling to deal with the inflexibility of graduate education. Graduate education was criticized for this lack of flexibility. The suggestion was to try to broaden the base of preparation at the graduate level to attract students with interdisciplinary interests.

The changes or differences between levels of education prompted some reflections about the student. Student protest at the undergraduate level was considered a major factor for bringing about changes in teaching and in the curriculum. It was predicted that this agitation would be reflected by students at the graduate level. Based upon research and consultation, Dr. Heiss indicated that student inputs were taking place at the graduate level. She referred to the discipline of phy-

sics and the Graduate Student Revolution Kit which prompted concentration on improving the preparation of graduate students for college teaching in physics.

Professional organizations were indicted for their failure to exert influence on their members regarding the importance of good teaching. At the graduate level, participants felt that professors have more allegiance to their discipline and its representative national organization than to the institution or colleagues in other disciplines at the institution. These professional national groups could be instrumental in exerting greater force for and recognition of good teaching.

There was a difference of opinion as to whether the influence of money from funding agencies was of paramount importance in affecting the quality of teaching at the graduate level. Generally, while many felt the federal government's emphasis in years past on research was worthwhile, the imbalance of funding did little to promote effective teaching. An agency to concentrate on providing funds for teaching activities was suggested in order to balance the inputs for teaching and research.

There was significant interchange regarding the role of the graduate school and the graduate dean. Why are graduate schools needed? Have they not outlived their usefulness? Dr. Heiss stated that the problem of their ineffectiveness stemmed from a failure to provide graduate schools and graduate deans with enough authority to sponsor innovative programs and budgetary power to reward new ideas designed to improve graduate teaching. While a vacuum of leadership at the middle level exists, perhaps the present structure of a graduate dean and a graduate school is not appropriate to bringing about needed change. The influence and authority for stimulating change must ultimately come from a higher level of administration. The worthwhileness of graduate schools remains questionable by some of the participants.

The presentation and discussion raised provocative points about teaching at the graduate level. While most factors affecting the quality of teaching were mentioned, including additional ones of student input and outside professional organization influence, the critical issue of tenure was not challenged nor was an analysis of the degree system mentioned.

Dr. Ann M. Heiss

V. PRIVATE ENTERPRISE AND EDUCATIONAL CHANGE

*Mr. Francis Keppel**

As I understand it, I have been asked here today in the guise of a businessman to represent private industry. The rules of the game there are somewhat different; hopefully what little I have learned about it will come out. I deliberately wrote the paper in the language of businessmen to bring out their somewhat special point of view, particularly in consideration of their increasing influence in the decision-making functions of higher education.

American private enterprise and American higher education have grown up side by side. They have long been accustomed to each other's face. This is not, of course, to say that custom has always brought affection, but it is to say that their connections are so well established that both parties tend to forget the complexity of the relationship.

For this reason it may be useful to try to categorize. Using the language of business, private enterprise (1) invests in higher education through taxes, and hopes for social return; (2) sells goods to students and institutions, ranging from books to cars to equipment to buildings; (3) consumes graduates as employees; (4) competes through the operation of proprietary schools and in-company training; and (5) provides the majority of the membership of the governing boards and the donors for colleges and universities. Under such circumstances, one might assume that some sort of anti-monopoly Education Act would long ago have passed the Congress.

Granted the vast financial power of private enterprise, which could express its wishes through one or all of these routes, why has private enterprise not been singled out as a main factor involved in educational change? Despite the regular speeches by business leaders on the need for efficiency and better teaching in higher education, why have they had so little influence on the "insides" of the institutions? Why has the Carnegie Commission on Higher Education not singled this topic out as one volume of its four foot shelf?

It is not hard to answer these questions in terms of the past. While private enterprise has paid a substantial part of the costs of higher education through taxes, it is only in recent years that the total has become burdensome, and the psychic rewards of private philanthropy are not to be underestimated. The question before us is whether the tax costs will rise to the point on which private enterprise will exercise vigorously its arts of lobbying on the executive and legislative branches that provide the money for higher education. On balance, it seems to me that the

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1970's are far more likely to have such an effect than the thirties, forties, fifties or sixties.

The reason has to do with numbers of students. As long as enrollments grew rapidly, the case for more money was not hard for higher education to sustain before government and industry. In the past decade undergraduate enrollments doubled. The usual estimate of increase between now and 1981 is 30%, followed by a modest contraction in the following seven or eight years. But very recent evidence suggests that the growth rate is tapering off faster than expected – perhaps to as low as 2% a year instead of the expected 5½% a year.

The natural reaction of private enterprise when the growth curve levels off is to turn to cost controls to assure returns. This means more attention to productivity and a sharper eye on numbers of personnel and on overheads. The natural reaction of higher education is to argue that any cutback is a cutback in quality, which is inherently immeasurable by the usual measures of productivity. The argument is going to be settled both in legislatures and in the market place. If the premise is granted that private enterprise is going to pay serious attention to the "insides" of higher education in the coming decade, do you think that its influence will be felt as a factor in change? The chances seem good to me; the real issue is not whether change will be forced, but what form it will take.

At this point you may recall that my second relationship between private enterprise and higher education was that of supplier of goods and materials. Is there not a good reason for private enterprise in general to encourage expansion in order to expand one of its markets? One might think that the vast enterprise of post-secondary education would bring enthusiasm to any sales executive. It did, in fact, for a brief period in the mid-sixties, when there were dreams of supplanting teaching staff with sophisticated equipment and software, and a huge "education industry" was foreseen. But the dream is gone, and the social need for jobs in the service area (to use the category in which private enterprise places education) is all too clear. There is a scattered enthusiasm in some parts of private enterprise for mounting large research and development programs to create equipment and systems to remake higher education, but it is an enthusiasm that is not shared by the finance or the marketing vice-presidents. The marketing is relatively small anyway, not above 2% of total purchases in post-secondary education, and the customers are conservative. Ours is a market economy, whether we like it or not, and the area of research and development is an institutional economic problem supported primarily by the federal support system. A few businesses are getting on the back of the federally – or foundation – supported research and development centers and competing for the right to market the products developed by these laboratories. Research and development in this sense is actually being paid for by the taxpayer, thus tax-controlled but not sensibly controlled. What it comes down to in this area is this: the government is the major agency pushing change and the industries are an arm of the government helping to im-

plement it. The conclusion I reach is that the part of private enterprise that services higher education is not likely to be a force for change. It will gladly adjust to what its customers want, provided the statement of want is accompanied by a check. This sector of private enterprise has learned the hard way that the dreamers about change have very little of it in their pocket.

The next category described private enterprise as also the consumer of graduates as employer. Do you think that as a consumer it is so dissatisfied with what it buys that it will set up its own Nader operation? Will it join the ranks of those who protest the inaccurate labelling of academic degrees? Will it demand the end of "credentialism" in alliance with the social reformers? I doubt it very much. Even if all the chief executive officers of private enterprises wanted to, which is most unlikely, they would never be able to get together. The competition is too keen, and no business would dare to risk its position while a competitor used the system of credentials to get the best people for its own operation. I doubt that the Sherman Act was intended to assure that private enterprise be in a position to control higher education through its employment policies, but that is a partial result. If Christopher Jencks in his new book on *Inequality* is to have any influence by writing (46)

> Economic success seems to depend on varieties of luck and on-the-job competence that are only moderately related to family background, schooling, or scores on standardized tests,

then he is going to have to persuade the young and their parents, the schools and the colleges and the political society to change habits. Private enterprise does not seem a likely candidate to take the lead by changing its recruiting habits.

The fourth category of relationship was private enterprise as a competitor to what is usually thought of as higher education through the establishment and management of proprietary profit-making schools. As far as I can tell, this is the only one of the six categories to which the Carnegie Commission is devoting explicit attention. I understand a volume is to be published shortly on the role of such institutions, authored by Virginia Smith. It is already clear that these schools, usually focused quite sharply on technical or professional skills, play a large part already in the pattern of post-secondary education – and apparently a growing part. They evidently meet a market need that is not being met by non-profit institutions, or presumably they would not be thriving. Large corporations, such as CBS and Bell and Howell, have made substantial investments in them, which suggests that they have financial attractions. Of all the categories I have mentioned, this is the one that may have the most direct impact on educational change, and is therefore the one to which we may want to direct intensive discussion.

Let me suggest four possibilities. First, the programs offered by these institutions are market-oriented. They explicitly train students for particular jobs, and they have to keep close to the job market. They change as they learn that the jobs change – or they go out of business. They recruit explicitly for such job-related programs, and they worry less about admission requirements than they do

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about performance at the end of the training course. Their very existence raises a question about the efficiency of higher education, a question that attracted little attention during the growth period of the last three decades – but will surely attract a great deal more attention when the period of expansion is over and the competition for the tax dollar is very keen. Why spend tax money if the private sector can do the job just as well? (I am well aware that "the" job is not the same as "the job" as seen by most colleges and universities, which see their role in far broader terms. But the language used will not be unfamiliar to those who deal with legislators.)

Second, many of these schools have developed effective "clinical training" relationships, so that their students become apt employees of a particular industry from the first day on the job. The reward system for teaching staff is directly related to teaching effectiveness, and failure is followed by departure. To put it bluntly, the heat is on.

Third, there are signs that the society as a whole is looking upon proprietary schools more favorably. The new Higher Education Act gives them a better standing in student support. The Board of Regents of New York has established a policy permitting the award of academic degrees by proprietary institutions. Massachusetts is currently considering comparable action with regard to a specialized Master's degree. There are stirrings within large industries, which provide sophisticated programs for their own employees, to seek comparable degree granting privileges.

As the holders of advanced degrees spread throughout our society, it is not unnatural that society may wish to make use of their specialized knowledge and their talents as teachers. The beginnings of programs to this end are to be found in the experimental efforts in New York and elsewhere to develop "colleges without walls" and to depend on examining as the way to decide whether the student has learned enough to deserve a degree or certificate.

But is this, after all, quite such a new idea? For many years profit-making correspondence schools have been active in preparing students for specific kinds of tests by arms length methods. It does not seem unlikely that private enterprise may enter the post-secondary area with still more vigor in the future if it sees a growing market. And the extent to which the market grows may be a result of the extent to which existing institutions do a good job – good as measured both by their clients or customers, and good as measured by those who finance and manage them.

These four possibilities suggest a brisker competition in one aspect of higher education from private enterprise: the area of technical and some professional education. The profits to those who invest in such proprietary programs will depend on the quality of the teaching program, and it is easy to predict that measures of "teaching productivity" will increasingly be demanded and related to costs. Since there is not likely to be much concern with the advancement of knowledge, or the skill of the teacher as the creator of wisdom or aesthetic judgment, or the capa-

city of the teacher to solve psychiatric problems, it is possible that the proprietary schools may come up with measures of the results of teaching before the usual colleges and universities do so. Since costs will be affected above all by salaries, the pressure will be to increase the student/teacher ratio– which is not the normal concern of faculties – and to try out various forms of teaching aids, ranging from the audio-visual to correspondence. The basic motivations will be efficiency and cost control. I am not arguing that these are necessarily the best of all motivations: I am only saying that they will surely be present and that colleges and universities that offer programs in technical and some professional fields may well feel the competition, both in the student marketplace and in the halls of the legislatures.

The fifth relationship of private enterprise and higher education referred to the composition of governing boards. In recent decades, the trustees have pretty much kept their hands off the internal management of colleges and universities. As a worker in the academic vineyard during these years, I was both grateful and admiring of their self-restraint. Now that we enter upon decades of tight money and less growth, and as I reflect on my own experience on governing boards, I feel duty bound to raise some warning flags. The impression that academics were underpaid in relation to the rest of the society, so widely held in the 1940's and 1950's, is changing rapidly in the 1970's. Not only have salaries gone up, but there has been a good deal of critical comment on short working hours and moonlighting. It is no longer accepted without question that free time for research is always productive. And the trustees that have observed faculties in recent years wrestling with protesting students and with financial or policy decisions are not impressed with the results. If financial heat is turned on, as I think it will be, it seems likely that trustees will demand a higher level of accountability and performance of faculties as a whole – or a changed system of management. This is a troubling possibility, since governing boards are part-time people, who usually do not know the academic world and may not be adequately sensitive to such basic issues as academic freedom and the needs of the creative scholar. Surely it would be better if scholars kept essential controls in their own hands, but if they are to do so, in their collective roles as departments and faculties, they will have to bite the bullet of productivity. This means measures of teaching effectiveness and supervision of teaching performance. No one can do the job as well as the faculty – no dean or president or trustee – but a vacuum will have to be filled by somebody.

To summarize: The combined effects of taxpayer pressure, of competition from proprietary schools, and of the demands of governing boards will force attention on the improvement of teaching in higher education and will require better results. The chances that private enterprise will come up with wonderful gadgets to solve the troublesome problem of high cost and low productivity are negligible, though companies will respond if the institutions say what they want and have some money to back up their request.

I am optimistic enough to think that higher education will respond to the challenge. If it does not, let me speculate for a moment about the results we might expect.

Should higher education remain diversified in its special interests, and these self-defeating activities continue balanced from within, change will probably come from pressure groups outside the academic world, much of it from state legislatures. There will be, increasingly, a demand for national data on what is being learned, particularly in the old-fashioned subjects. This is now happening in the so-called lower educational world – a national assessment program with samples – and it is leading to a lot of talk about making teachers accountable at this level.

But let me suggest that more effort will be spent on making the individual schools accountable to the state legislatures in terms of a reporting system, institution by institution, than on making all 2,300,000 teachers accountable individually. My own instinct is that such a system would probably be a good thing, provided the academic world controls it, and suggests to me that the effort to focus on the individual teacher's productivity is likely to be a waste of tactical energy.

Instead, what is needed is a flexible method to measure what people are learning within the university over time. I would suggest that the ideal place for the development of a program to address these problems is within the university itself, and that consideration be given to information and ideas coming from all members of the academic community, faculty and students, deans and presidents. Based on the amount of time it took to begin to look at the results of national assessment at the primary and secondary level, I would say we have about a decade before the results of these studies will begin to have an influence on policy implemented in the state legislatures.

May I also suggest that academic leaders spend some time listening to the federal legislature develop its educational programs, that we prepare our deans and presidents for such possible developments as union negotiations, and our future professors for the political realities of academic life. Without each of us taking responsibility for determining the direction we want education to take, the government will take it, and will make fundamental decisions for us based on data which might not truly represent our achievements or goals.

COMMENTS

Reactions to Mr. Keppel's talk concerned the role of private enterprise and government, the emerging proprietary institutions, national assessment and evaluation of teaching and learning, the impact of legislative and trustee involvement in the management of higher education, and inadequate utilization of university resources. While all seemed to agree that private enterprise has had little direct effect upon the management of higher education, many found it difficult to assume that private enterprise would continue to have little impact.

A fear was expressed regarding legislative and governmental influences in promoting accountability in teaching. The movement toward a national assessment of teaching has taken place at the lower levels. It has raised much talk about holding teachers accountable and about the necessity of developing effective reporting systems. The projection is that this national assessment will in a decade or two be done at the higher education level. Who will provide the leadership? Participants were somewhat skeptical that universities would undertake assessment without being forced into it. After all, with regard to teaching, who is presently assessing teaching productivity? Schools of education were criticized for not providing leadership. Enlightened leadership does not seem present. Universities and faculties were indicted for not utilizing their valuable resources for the study of the university, the result of which could be effective self-development of an institution.

The external forces for change appear on the horizon. Teaching assessment appears to be linked closely to management. Concern was expressed about making decisions based on cost data. Proponents of the complexity of the university and the learning process recoil at disregard for the individual. One suggestion was to prepare new professors for dealing with the political realities of academic life. Participants, as faculty members, felt helpless in confronting the reality of the inability of faculty to do much about assessment. While emphasis has been placed upon individual teaching assessment, it was suggested that external forces would be concerned with institutional or departmental assessment.

A discussion of national assessment led to more specific concerns about evaluation of teaching and the realization that educators have not really been curious enough as to how students learn. There were differences of opinion as to whether educators are over-confident or lack confidence about measurement and evaluation of teaching. Presently, there is little relationship, if any, between actual learning as compared to assessment procedures (grading systems). Of concern was the association of innovation with evaluation. It was felt that the status quo, or on-going programs, should be evaluated instead of new projects and programs, which often are killed by negative outcomes of early evaluation. Also a difference between evaluation and policy implementation was discussed. This was particularly important for insuring that evaluation starts from within where the data are and where the results of evaluation can be fed into policy making and implementation. Again, the fear was that this movement would come from outside higher education. Government was seen as the major agency pushing evaluation and change, with industries as an arm of the government helping to implement changes.

The recent Higher Education Act with its emphasis on proprietary institutions raised some concern among participants. Post-secondary is a new word for higher education academics. The impact of this recognition of approximately 9,000 proprietary schools has yet to be realized. Also, the inclusion in the Amendments for state planning commissions caused some concern about the implications of this move for higher education institutions. The competition with proprietary

schools is viewed as a drain on resources of higher education institutions and promotes an unfair comparison when using cost effectiveness tools of measurement. Even more distressing to some participants is the relationship of costs to teaching productivity.

Mr. Keppel's presentation forced participants to step outside of the framework of the institution and faculty role and to react to the role of a legislator or businessman looking at teaching and higher education. As such, it appropriately focused on only a few factors, perhaps the major ones, affecting the quality of teaching.

VI. PROFESSIONAL ASSOCIATIONS AND COLLEGE TEACHING

*Dr. John A. D. Cooper**

In thinking about what I might do to participate in this conference, it seemed appropriate to tell you how some of the things we have been discussing here have been implemented in at least one association, the Association of American Medical Colleges.

I would like to begin by briefly outlining the history and development of the AAMC, and then move on to discuss some of our more recent efforts. These have, I believe, implications for all efforts to improve the quality of the instructional process.

Historical Development of the AAMC

The Association of American Medical Colleges was formed nearly a hundred years ago to advance the level of medical education in America. On May 15, 1876, a group of six deans requested a convention of medical schools to consider matters relating to reform in education, and on June 2 of that year the provisional Association of American Medical Colleges was established. In 1879, the Association register showed 48 schools out of several hundred in the country conformed to suggested standards. By 1882, only 11 schools were present at the annual meeting; the others had resigned because they would not meet the educational requirements. At that time the Association unofficially disassembled and no meetings were held for several years.

The AAMC reorganized in 1890; in 1903, it appointed a secretary. In 1957, it appointed an Executive Director and expanded the staff, and with foundation support continued its reorganization and redirection. From 1965 through 1969, another major reorganization occurred in which faculty, students, and teaching hospitals were brought into the governance of the Association. The addition of faculty and teaching hospitals was particularly significant in that they are today an important part of the educational research programs of our medical centers; the addition of students completed the input from the total medical community. In 1969, I was appointed the first president of the Association, and we moved the headquarters to the National Center for Higher Education in Washington.

Establishing Educational Standards

One of the original purposes of the Association was to establish standards and improve the quality of American medical education, which before 1910 was in a

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very disorganized state. At that time there were a number of proprietary schools, and medical curriculum was not graded but more a hit or miss affair.

Membership in the Association has always been limited to those institutions that meet minimum standards. In 1918, the Association informally joined with the professional association, the American Medical Association, for joint accreditation visitations to medical schools. Their list of accredited schools was later accepted by the Federation of State Medical Boards, which represents the licensing organizations for the practice of medicine in each state. In 1942, an official Liaison Committee on Medical Education was formed between these two organizations; for the last thirty years this effective liaison committee has been formally recognized as the accrediting agency for undergraduate medical education.

In 1966, the Association recommended that the accreditation effort be expanded to include graduate medical education and the preparation of specialists. We are now in the process of initiating this new organizational format through an association of the AAMC; the AMA; the American Hospital Association, which represents all institutions in which clinical education is given; the American Board of Medical Specialties, which represents the various Boards responsible for certifying specialists; and the Council of Medical Specialty Societies, which represents the American College of Surgeons and the American College of Physicians among other specialty groups. This association effectively melds the needs and viewpoints of those in practice and those in education, and opens a free interchange within the accreditation process between the two. At present, most of the clinical teaching is carried on by full-time faculty whose practice of medicine is secondary to instructional and research responsibilities. Hopefully, this new relationship will aid in the formation of a more effective and medically complete educational program.

Accreditation Standards

The AAMC gives only general guidance to an institution through a very broad definition of structures and functions. In the accreditation process the Gestalt of the institution determines whether from the total picture of faculty, administration and facilities, one can assure both the public and the student that there is an adequate education program.

Soundly conceived experimentation is encouraged, even when it may deviate markedly from traditional forms of medical education. For example, Ohio State University is using total computer-assisted instruction for 30 students during their first two years, with only periodic meetings with faculty to discuss and amplify areas the student has been studying. Rather than dehumanizing his education, we feel this allows the student to proceed at his own rate without sacrificing the one-to-one relationship with a faculty member. In addition, we have stimulated the use of non-cognizant student selection criteria, especially in the area of the Association's interest in increasing and improving the minority student program in medicine. While scores on standard tests do not match up with traditional para-

meters, we find these students do not have a substantially higher attrition rate than the rest of the class.

We are now in the process of moving as quickly as possible away from simple accreditation, in which a team decides whether the institution meets minimum standards, into institutional self study, in which the institution determines its own needs and exchanges ideas with members of other institutions on better ways to educate physicians. We have found that the accreditation process is a helpful mechanism to inspire interest in self-renewal and innovation in those institutions that have not yet moved away from the traditional classroom-laboratory approach. For example, largely by asking the right questions and making suggestions during the accreditation procedure, we feel we have been able to increase the representation of minority groups from 4 to 10% of the entering class, and that of women from approximately 9 to 17%.

Today traditional boundaries are beginning to blur, and we are increasingly beginning to interdigitate various parts of the educational program. In the accreditation process curriculum is not specified, although flexibility in content and length of curriculum is urged. For example, at Northwestern we started a six-year program which has an orderly course from graduation from high school through medical school; Stanford, another approach, has no required courses in the traditional medical school curriculum. Instead, the student meets with an assigned faculty member or group and together they determine what he has brought with him and where he wants to go, and then design a program specifically to help him accomplish his goals. This area is in much stress and ferment today.

Most medical schools in the country no longer use competitive grades. Instead, there is an evaluation of mastery, i.e., pass or fail, and an extensive anecdotal description of the student's strengths and weaknesses, which become part of his record and the recommendations that are made for him in his subsequent graduate education.

AAMC Concern with Teaching and Learning

The AAMC has been involved and interested in the problems of teaching and learning for many years. As early as 1920 and 1921, annual conferences were carried on informally in individual institutions to discuss such questions as how teaching and learning occur. In 1952, we identified problems resulting from the increased output of physicians during World War II, and responded with the initiation of our Teaching Institutes. Under the direction of an institute leader willing to devote one-fourth of his time to planning and organization, these Institutes were concerned with aspects of teaching and learning in the basic and clinical sciences, student selections, and the nurturing of students in the educational setting. Invited representatives of the area under study were brought together for a four-day presentation of papers and workshops. We believe these Institutes were responsible for spreading a number of the educational innovations of the day throughout the country.

In 1960, the AAMC replaced the Teaching Institutes with Teaching Seminars, which grew out of an informal liaison between the School of Education and the School of Medicine at the University of Buffalo to consider some problems of educating physicians. Their resulting program was transferred to the AAMC, where national seminars were held for medical faculty. These seminars were specifically supported by the Association, and today some 50 schools in the country have formally organized units which are involved in research in medical education and the teaching-learning process. Many professional educators are involved with these programs, and although there has been some difficulty in getting this group fully accepted by medical faculty, during the last ten years their expertise has provided much assistance to medical educators in designing their programs and curriculum.

Annual conferences on medical education are held in conjunction with the AAMC Annual Meeting; attendance at these conferences averages five representatives from each school, varying from individuals on the faculty interested in curriculum to educational psychologists working in medicine, from those devising test instruments to those interested in research and new approaches in clinical teaching, computer-assisted instruction, and so on. These papers are published and have attracted broad attention throughout the medical schools and more broadly throughout the educational field.

Committees and Staff Activities

In 1971, the AAMC reorganized its Division of Education, Research and Measurement into the Department of Academic Affairs, which is now concerned with the development of curriculum and programs, evaluation and measurement, student affairs and biomedical research. We have a number of people with backgrounds in educational psychology and educational measurement working with a number of medical institutions in their development of these programs.

For example, in 1972, we formally initiated a new program with representatives from each school concerned with the development of curriculum, research on medical education, and systems of evaluation for student achievement as well as faculty and curriculum effectiveness. Resulting from the combined efforts of this group and the staff of the AAMC are several publications: a Directory of Educational Specialists within the medical schools, which lists interests and capabilities of 500 educational specialists in order to facilitate the exchange of ideas and to bring in consultants for specific problems; and Annual Curriculum Directory, which includes the innovations various schools are attempting in order to move beyond traditional forms of medical education; and an Admissions Requirements Handbook, which provides the student with a general understanding of varying medical education philosophies and specific sections on the approach offered by each medical school, in order to permit him to match his goals with those of the institution.

Another new project we are initiating grew out of studies we did for the National Library of Medicine on defining and achieving objectives for their Lister

Hill Center in Bethesda. The resulting report stressed the importance of creating a biomedical network in promoting audio-visual and other non-print material, and in the development of computer-assisted instruction. Following that report, we prepared another study for the Library on how institutions could reorganize themselves to articulate better with the Lister Hill Center. To implement these proposals, the recently funded Educational Resources Project will first evaluate and index currently available non-print educational material, now in varying quality and never accurately described, for format, level of difficulty, and its appropriate place in the professional health field. Hopefully this information will be put on MEDLINE, which is the computer storage program of the National Library of Medicine, and will be retrievable under a variety of headings.

Following this process we will assign groups with expertise in particular areas to identify gaps in available material and, in conjunction with the National Medical Audio-visual Center (NMAC) of the National Library at Atlanta, produce this now unavailable information for distribution to the institutions. Ultimately we hope to have a single approach to non-print material for the health professions, and thus hasten the rate of implementing new techniques and other innovations.

The AAMC is also developing a test item bank in which the faculty of all participating institutions will deposit test questions to be assessed by AAMC evaluation experts in order to improve their reliability and validity. These test items will be put into a computer and indexed and cross-indexed for content, level of difficulty, and format. These can then be called for by faculty for the construction of formal evaluation procedures, or by the student for self-instruction.

Because of the increasing flexibility we now have in medical education, use of standardized tests is difficult for any kind of valid evaluation of student progress. In addition, the philosophies of the schools are so different that a standardized test will not serve. Since we can no longer turn the pages of the calendar to determine how far a student has progressed, it is important that we have good evaluating techniques. The test item bank permits evaluation instruments to be tailored specifically to a school's philosophy of training and approach to measurement. Ultimately we hope the bank will provide the kind of assessment that will significantly help to further the introduction of flexibility in medical curriculum.

The federal government recognizes the shortage of doctors in America, and requests we produce more of them. For a multitude of reasons, the shortage remains. To compound the problem, through certain reimbursement requirements, we are pressured to produce more physicians in the same mode we currently practice in the community – a mode already shown incapable of responding to the need. The Association recognizes that we need to undergo a revolution in the way health care is delivered if we are to meet society's expectations for better health, and therefore a major effort of the AAMC next year will be to aid in the development of new models for the delivery of primary care.

One part of the solution is the development of health care teams, and by this approach extend the efforts of physicians. Some successful work in this area has already been done. But by far the most important need now is to define roles of authority and responsibility for other health professionals who will be members of the team appropriate to their level of education and training, to give them a sense of dignity, and to reward them appropriately. Each member of the team must be secure in the significance of his contribution – he should feel he is not merely working for a physician, but is part of a team, each part of which is necessary. We believe that through this mechanism we can deliver more effective care in general to each community, and, hopefully, confront present geographic imbalances. So far public acceptance of experimental health teams has been good, sometimes better than that for the physicians alone.

If we continue to isolate the educational programs for the various health professionals, we cannot hope to have an impact on the system as it is today. Clearly, we need to bring together during at least their clinical educational experience those people who will be working together in the community.

Medical schools are rapidly expanding their concerns and interests to the improvement of health care, particularly primary care. This effort is not confined to Departments of Community Medicine or Family Practice but is also engaging the traditional medical disciplines. With the opportunities provided to permit health care delivery, there is promise of providing more effective health care for the American public.

COMMENTS

A purview of the history of AAMC demonstrates how a professional association can be effective in promoting more innovative educational programs and improved teaching. As such, it serves as a model for other professional groups. The question remains, how progressive are other professional organizations and associations? Few appear to be as aggressive or as concerned with improving teaching as AAMC. One participant questioned the analogy of medical education to other disciplines and fields of study. Medical education with its clinical application and recognized continuing knowledge explosion is a dynamic and constantly changing career field. Is this true of other fields, many of which are viewed as stagnant by comparison?

Accreditation in medical education serves as a positive force for stimulating educational change. Several participants suggested that this was not true in other disciplines where the accent upon minimal national standards ruled out experimental curricula and teaching strategies. It was questioned to what extent professors and professional organizations realize the potential for using the accreditation process to stimulate change rather than to inhibit change.

Dr. Cooper described AAMC sponsored projects, especially those of the Department of Academic Affairs. These concerned evaluation and measurement of students, faculty, and the consumer. Through this group, governmental spon-

sored educational resources projects have taken place concerned with audio-visual materials and computer-assisted instruction. The Test Bank idea for checking on reliability and validity of test items serves a practical need and represents one activity a professional association can perform for professors and students in higher education institutions. Participants at the conference questioned what they thought might be a fragmented approach to improving curricula and instruction. Dr. Cooper suggested that a revolution was needed with new models of education superseding present traditional forms. This is particularly true in medical education with the need to design training programs concerned with health care delivery as the central focus in the teaching of students.

With regard to the degree system in medical education, it is apparent that some aspects are being changed; particularly traditional patterns concerned with time of academic and clinical preparation. Students are being given more responsibility as curricular needs and learning needs become recognized. Still, the amount of success in instructional delivery innovation remains negligible. The feeling seemed to be that things are moving, though progress is only beginning to become visible. One of the problems facing AAMC and medical education as it innovates in the teaching area is that funding patterns of the federal government reinforce traditional teaching and training processes and patterns.

Medical education must change. The AAMC feels it can help. If internal professionals cannot bring about this change, then change will be forced by external agents. This is also aptly true of other disciplines and their respective professional associations and organizations.

Fred M. Hechinger

VII. PLANNING AN EVOLUTION VS. EXPERIENCE AND CONTROLS

*Dr. Peter P. Muirhead**

The Education Amendments Act of 1972
A Changing Federal Role in Higher Education

This is a particularly timely occasion for us to be considering ways to improve teaching in higher education because even as this conference is going on, the federal government is engaged in implementing legislation which will surely bring about profound change in the years ahead.

I refer to the Education Amendments of 1972 which include provisions that will have an historic impact on the roles our colleges and universities will play in the last critical years of the Twentieth Century. In the opinion of many higher education leaders this new law embodies the most comprehensive higher education legislation in the history of this country. Not only does it extend and amend major legislative authority enacted in the sixties, it establishes major new dimensions of federal concern and broad new relationships with post-secondary institutions. It may very well be that this legislation will provide an affirmative answer to one vital question:

> Can the federal government contribute significantly to helping our institutions of higher learning become more effective and more responsive, without at the same time imposing unwarranted federal control over the higher education process?

It is too early to predict how the new law will affect the course of education. Even in the short run, its fiscal impact on institutions cannot be determined because neither the administration nor the Congress has had time to translate its authorizations into appropriations. It will be weeks before first-year funding has been voted. It will be months, possibly years, before the provisions of the Act are fully implemented. Its full significance may not become apparent for decades.

It is not too early, however, to discuss the implications of the new law, particularly within the context of the vitally important theme of this conference, "The Improvement of Teaching in Higher Education."

First, I would like to review briefly the highlights of the Law, because many of its important provisions have received relatively little public notice compared to the controversial sections dealing with the busing of pupils in elementary and

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secondary schools. Some of the press accounts, headlined "Congress Passes Anti-busing Bill," and "President Signs Busing Measure," gave little indication that the Bill was essentially higher education legislation of great scope and magnitude which, in the finest traditions of American Politics, members of both parties worked very hard to produce.

Second, I would like to explore with you what some of the new programs authorized may mean for the future of higher education in its continuing quest to suit its pluralistic form to the increasingly pluralistic needs of its students. The Bill is historic in various major respects. It provides authority for an unprecedented national commitment to extend post-secondary opportunities to all young people regardless of their financial ability, a new research effort intended to revitalize our entire educational system, and a major new thrust to support and encourage institutional renewal.

Student Aid (Entitlement)

In his 1970 message on higher education, the President asked that aid to students enrolled in post-secondary institutions be expanded and redirected to assure that every student would be eligible for a combination of federal grants and subsidized loans sufficient to make up the difference between their college costs and what their families were able to contribute. These provisions were aimed at closing the cost gap for low and moderate income families so that their children could have the same opportunities for a post-secondary education as those enjoyed by higher income families. Congress has in large part provided that opportunity, through a new program of basic grants and supplemental aid from the existing educational opportunity grant, college work study and national defense and guaranteed student loan programs. In effect, the law first provides support where it is needed most – to lower income families, and relieves the immediate burden of the cost of education to middle and upper-middle income families with low-interest subsidized loans.

Institutional Support

Complementing these bold actions in the field of student assistance, Congress authorized a major new program of institutional assistance. After lengthy deliberation, the formula chosen for this program was based essentially on the principle that institutions should be aided according to their contribution to the national goal of equalizing opportunities for students. This is a very promising development that recognizes the sad state of affairs in our nation in minority group opportunities for graduate and professional education. This law provides for an increase in the support of developing institutions serving minority groups from the level of $52 million to $100 million, in order to strengthen the pre-graduate and pre-professional training of their minority group students. This is but a very small part of the problem but, in terms of national priority, one which seems to be critical. As educators sit in their places of influence, we hope they will find ways to implement the purpose of that rather magnificently increased pro-

gram to improve the quality of developing institutions' programs, and, even more importantly, to help their graduates get into graduate and professional training.

At the same time, Congress took two additional steps which indicate the complexity and uncertainty which still surround the issue of the federal role in assisting higher education. Recognizing that the new formula for general aid will not meet the needs of institutions in critical financial distress, Congress authorized a program of emergency assistance. And Congress established a National Commission on the Financing of Post-secondary Education, charged with determining the appropriate roles of federal and state governments in supporting higher education. Its report is expected next year.

Congress also recognized the need for a new federal role in encouraging and facilitating reform and innovation throughout post-secondary education. The newly established Fund for the Improvement of Post-secondary Education is designed to stimulate nationwide interest in institutional renewal, and to encourage a new concern for diversity to match the diversity of needs, abilities, and interests of the incoming students.

Congress responded to administration recommendations and made its own contributions in a number of other important provisions. It made an historic step toward equal opportunity for women by writing a strong prohibition of discrimination on the basis of sex in employment at all educational institutions, and in admissions at all public undergraduate institutions, and vocational, professional, and graduate schools.

To encourage extension of the career education concept throughout the entire educational system, new programs were authorized to support the planning, development, and expansion of community colleges and to help the states infuse career education into elementary, secondary, and post-secondary institutions.

A New Research Effort

In submitting his original proposal for the National Institute of Education (NIE), the President noted that as a nation we spend less than one-half of one percent of our educational budget on research, compared with five percent of our health budget and ten percent of our defense budget. When the Commissioner of Education reported to Congress on the need for additional research, he pointed out that we know more about raising corn that we do about raising kids. The NIE is a step toward correcting that imbalance. It is expected that NIE, when fully developed, will be an important element in the nation's educational system, overseeing the annual expenditure of as much as a quarter of a billion dollars.

The NIE is now established as a new research institution within the Department of Health, Education, and Welfare, with a Presidentially-appointed director, Dr. Tom Glennon, and an about-to-be-appointed distinguished national advisory council. Its mission is to undertake a systematic national effort to make education more effective at all levels. It is intended to mobilize the best minds from a

variety of disciplines to deal with a range of important problems, from improving compensatory programs to developing broader and more sensitive measurements of learning and ways to employ our technology to greater educational advantage.

Congress has affirmed the need for the Institute and the purposes envisioned for it. In creating the Institute, constructive provisions were added to assure that its findings will not gather dust on scholarly shelves, but will be put to use promptly in our classrooms.

In establishing NIE as a separate agency within HEW the Congress took a further constructive step. NIE will be a part of a new education division headed by an Assistant Secretary for Education, Sidney P. Marland, with line authority over both the Office of Education, the new research agency, and the Fund for the Improvement of Post-secondary Education.

The Significance of the New Law

Simply outlining these new authorities does not begin to describe their significance. Nor does a recitation of their potential funding levels, estimated to total somewhere between $18 and $20 billion. Here a word of caution is in order: the gap between funds authorized and funds appropriated may be very large, particularly in the initial stages of implementing the legislation. The assumption that all funds authorized will be appropriated is something which never was and never will be. It is reasonable to expect, however, that the major thrusts of the legislation – equal educational opportunity, institutional reform and research to make education more effective – will be given priority consideration in the fiscal year 1973 appropriation process.

Expenditures under the Act in its first year will, moreover, be further delayed by the need to develop and publish regulations for the new programs. Some of these regulations will require extensive consultation with the higher education community, and before they become final, all must be subjected to public scrutiny and comment for thirty days following publication in the Federal Register. Some programs may be implemented within weeks of final appropriations action – particularly those existing programs which were extended or only slightly amended by Congress. In the case of the new programs, however, the process of developing regulations may be lengthy. Nine separate planning task forces are now at work in the U.S. Office of Education to make the implementation process as prompt and effective as possible.

So the complex contents of the new law do not tell us all we need to know of its significance. Much will depend on the way the law is implemented – which will depend, in turn, on a blending of leadership from the executive branch, oversight from the Congress, and constructive participation from the entire community of higher education.

What more is there to be said of the significance of the new law? What of the changes which these new student aid provisions imply for the rest of the educational system? Perhaps the effect may be most significant in the elementary and

secondary schools. What can we suppose will be the effect on the classroom teacher who no longer can assume that some of those children will never be able to afford post-secondary education, but sees every pupil as potentially entitled to post-secondary education? How will this affect the quality of teaching? Still more important, how will the certain knowledge of post-secondary opportunities affect the attitude and performance of the average student, the underachiever, and the disadvantaged student? At the least, a revolution will be required in school guidance and counseling services. And how will higher education bend to the need of serving the wide range of student interests, abilities, backgrounds and desires that this law will spawn in the years ahead?

We can only speculate, as well, on the implications of a technical change in the law making half-time students, and students in vocational or proprietary post-secondary institutions, equally eligible for all student aid provisions. But surely this is no mere technical change: it represents a dramatic change in national policy.

For decades, we have proceeded on the assumption that a four-year liberal arts education was to be encouraged. If a student wished to go to college to study history, philosophy, Greek, or whatever full-time, our laws have provided that the nation's taxpayers would help pick up the tab. At the same time, a working man attending college at night, or a high school graduate preferring to learn an honest trade at a business school or some other less-than-collegiate level, had to make it on his own without federal assistance. In retrospect, it is hard to describe this as sound national policy, and the change is eminently desirable.

What effect will this new policy have on the student? Hopefully he will be able to make sounder career choices, relieved of the pressure to attend college simply because that is what people are expected to do. Hopefully this will mean a strengthened sense of purpose in all post-secondary students, whatever the institution and program. What will be the effects on our society when men and women come to be respected and honored for the quality of their work – whatever it may be – rather than for the possession of a piece of parchment from any particular institution?

These student aid provisions, in brief, contain built-in incentives to encourage greater flexibility and diversity throughout the total structure of post-secondary education. Similar incentives are more explicit in other provisions of the Education Amendments of 1972. The new program of grants for improvement of post-secondary education authorizes $75 million by the third year specifically to support projects designed by the institutions themselves for the following purposes (35):

1. Encouragment of the reform, innovation, and improvement of post-secondary education, and providing equal educational opportunity for all;
2. The creation of institutions and programs involving new paths to career and professional training, and new combinations of academic and experimental learning;
3. The establishment of institutions and programs based on the technology of communications;

4. The carrying out in post-secondary education institutions of changes in internal structure and operations designed to clarify institutional priorities and purposes;
5. The design and introduction of cost-effective methods of instruction and operation;
6. The introduction of institutional reforms designed to expand individual opportunities for entering and re-entering institutions and pursuing programs of study tailored to individual needs;
7. The introduction of reforms in graduate education, in the structure of academic professions, and in the recruitment and retention of faculties; and
8. The creation of new institutions and programs for examining and awarding credentials to individuals, and the introduction of reforms in current institutional practices related thereto.

Clearly, the design here is to effect far more than piecemeal improvements in the existing structure of post-secondary education.

General institutional support, as provided in the new law, contains still another order of implications. It will not make the difference between failure and survival for those institutions in critical financial difficulty, but, to the extent it is funded, it will provide a broad base of support which should mean significant relief for all institutions. Here, too, there are some built-in incentives, primarily to foster greater opportunities for the disadvantaged.

Since World War II, national policy has encouraged our youth to attend college. In the past decade, with the growth of student aid programs, this policy has resulted in a vastly accelerated growth of enrollments. It has also contributed to the financial crisis of the colleges and universities, by failing to recognize that each additional student imposes an additional burden on the institution's own resources. The new law attempts to correct this failure of national policy by providing general institutional aid which institutions may use as they desire. The formula, however, allots the funds on a cost-of-instruction basis, geared to the number of federally-aided students.

I cannot fail to mention the potential importance of the National Institute of Education for higher education. While much of its basic work in the initial stages will undoubtedly be devoted to fundamental problems of learning and compensatory education in the elementary and secondary schools, this new instrument for educational research has as its mission the whole of American education. Research is desperately needed to help clarify educational needs and priorities at all levels. And it should be assumed that much of this effort will be mounted by means of grants and contracts with scholars and institutions of higher education.

Each of the major provisions of the law contains themes for several seminars. I shall not try to cite them, except to underscore once again the importance of the occupational education and community college programs, with their authorizations for large-scale support of greater diversity and flexibility in the community of post-secondary education. In interpreting the mission of occupational

adult education, however, it should be remembered that this is not the exclusive business of the community colleges, but the business of all higher education. These provisions have obvious potential for improving teaching in higher education and for according new motivation and respect for the great majority of occupations which do not require and do not need a baccalaureate degree.

In addition, these programs include incentives for the comprehensive development of post-secondary opportunities through the establishment of State Planning Commissions. These commissions, established in each state as a group representative of all post-secondary education and all citizens, will determine what seem to be the post-secondary needs and strategy for that state. Before the federal role can be implemented in support of post-secondary "occupation without education" programs, each such proposal must pass muster according to the plan developed by this post-secondary commission. These and other provisions (notably for women's rights and student aid) have vast potential for expanding opportunities for all in our society, whatever their age or present occupation.

In closing, I think that it is fair to indicate that the Education Amendments of 1972 comprise the most comprehensive and significant body of federal higher education legislation in our history. Until now, we have not had anything resembling a coherent national strategy, or an adequate federal structure, for dealing with the problems of higher education. The Higher Education Act of 1965 – the last major building block towards a national policy – provided a variety of assistance through a series of categorical programs designed to meet particular needs but not the interests of higher education as a whole. In the intervening years the education community has expended a great deal of effort (with little success) to obtain funding for these programs.

Now, however, a remarkable change in the federal role in higher education has been accomplished. We have moved away from the categorical approach to a broader base of general assistance for all institutions, which can potentially provide far more effective support for higher education as a whole. Categorical aid will no longer provide the only help, but will play a more appropriate role in supplementing general assistance.

The new Act does not solve all of our problems. In fact, it creates some.

The new Act contains some pitfalls which could, with insufficient attention, lead to the imposition of unwanted controls on the education community. The so-called "bail out" provision for institutions in critical financial distress is a case in point, for it invites the Office of Education to establish standards by which the federal government could decide which institutions should survive, and which should be allowed to die. Certain features of the student aid provisions encourage further federal involvement in the sensitive area of institutional accreditation. The establishment of State Planning Commissions may restrict the authority of some existing agencies. And the National Commission on Financing Post-secondary Education, with its legislative mandate to define appropriate roles for federal

and state governments, could open the door to undue governmental involvement in the decision-making process for higher education.

But these potential dangers should be warning enough. Their very existence should serve to alert the education community against unwanted inroads on academic freedom. Undue federal control is unlikely to occur as long as the academic community is determined to resist it and our record in that regard is a good one. On this point, Secretary Richardson likes to recall the response of Mr. Justice Holmes when reminded of the famous words of the great Chief Justice John Marshall, that "the power to tax is the power to destroy." Holmes declared: "not while this court sits." We need not and must not allow responsibility for education to shift to federal hands so long as we are determined to preserve institutional autonomy and local control in this country.

We still lack a national policy for the whole of higher education, particularly in the field of graduate education. The federal establishment has barely begun to consider the impact on colleges and universities of shifts in priorities and funding for its many programs outside the Office of Education – in Defense, NASA, AEC, NIH, and other agencies – which comprise 82 percent of the total federal outlays for higher education, estimated at $7.4 billion for 1973.

Nevertheless, the foundation for a sound national policy is inherent in the Education Amendments of 1972. The Act recognizes, for the first time, the national interest in maintaining a strong and versatile system of post-secondary institutions to meet the educational needs of the entire population. The shaky superstructure of categorical aids has been reinforced by the authorization for general institutional support, related to the institution's commitment to serving the disadvantaged. A lack of personal funds has been effectively removed as a reason for anyone to be denied whatever level of post-secondary education they may be qualified to seek. The need for federal support and encouragement of institutional self-renewal has been recognized.

Higher education is now faced with an altogether different problem than it has faced before: serving the needs of an increasingly diverse post-secondary student body and the whole range of their interests and abilities. The solutions to these problems will only come if those in graduate education can join hands with the community colleges, junior colleges, and the technical institutes, perhaps through the post-secondary State Planning Commissions, in order to find a way to present a united national policy in support of post-secondary education. If I have learned anything at all in Washington, it is that you get no place if you allow yourself to be divided, because then you will be conquered.

Because this is landmark legislation you and other leaders in higher education should insist on a voice in its implementation, and must maintain watchful oversight of the way in which its provisions are carried out. The extent to which it realizes its vast potential will depend not only on the executive and legislative branches of the federal government, but equally on the higher education community itself.

COMMENTS

Dr. Muirhead's paper and presentation provoked discussion and unsettled feelings among participants at the Conference. The major concern was whether the universities and higher education community can retain control over their affairs in view of the impending outreach of the federal government as emphasized through several features of the Education Amendments to the Higher Education Act, including authorization of $18 to $20 billion for all post-secondary institutions. Since government funding can have a profound effect in determining the direction and efforts of innovation in teaching and learning, a number of key issues were raised regarding the monetary and other provisions of the Act.

The accent upon student entitlements coupled with emphasis on post-secondary institutions was viewed as an opening of the gates to a larger number of students for higher education training. How will the influx of all students, especially with guarantees of specific support for minority groups, affect the quality of teaching? The student aid support encourages movement across state boundaries for students, especially upper class and middle class students. In what way does this help those institutions in need of assistance to remain viable educational learning centers? The opinion of several is that the law induces increased tuitions. Also incentives were viewed as being tied to costs, and cost is not necessarily related to effectiveness of the instructional program. Of concern is the issue of whether the law makes the middle class the underprivileged class with regard to financial supports. The implication is that institutions are encouraged to develop special programs for special groups to qualify for federal support.

The feeling that higher education is at a disadvantage by recent federal legislation was especially evident with regard to graduate education. No provisions are made directly for this level of higher education and the implication that all levels and types of training necessitate equalization in attention and funding is not considered realistic by many participants. Graduate education is viewed as the powerhouse in higher education, but it was felt that university leaders were neither involved nor consulted in the development of the legislation. Instead the largesse of the Act appears to be directed to developing institutions rather than to traditional institutions with sound graduate level programs. With apparent lack of visible leadership, it was stated that the National Board for Graduate Education is now moving to involve a number of key university leaders and organizations in an attempt to promote more vocally in the future the cause of graduate education before Congressional leaders.

In keeping with the theme of the Conference, concern was expressed as to the Bill's provision for the improvement of teaching. It was felt that the Act proliferates the problems of how to deliver instruction more skillfully and more productively. How does it relate to the improvement of instruction in higher education; where are the provisions for innovations in learning, in curricula, and in instruction? Dr. Muirhead responded that it does not provide much in the way of support except through research efforts, if these are directed toward instructional

problems, and through the Fund for Improvement of Public Secondary Education, which will be concerned with innovations at both the lower and post-secondary levels.

The message repeatedly made clear through this segment of the Conference is the impact of government on the affairs of higher education, including the instructional programs. The addition of proprietary schools to the post-secondary spotlight is met with skepticism, if not displeasure, by higher education academics. The call for a united front by all institutions will present a great challenge for educators as will the development of instructional delivery systems and innovations to meet an expanded diversity of student population opened by the Higher Education Amendments of 1972.

VIII. LAST CHANCE FOR LEADERSHIP

*Mr. Fred M. Hechinger**

There is a long, human tradition of people shooting the messenger of bad news. I am in my business a professional messenger, and in the course of my years as a newspaper man I have not lacked bad news. I can only hope that your aim is as faulty as that of the people to whom I have delivered bad news before.

We have all become sated with stories of credibility gaps – gaps between the government and the people, the seller and the buyer, parents and children, the military and civilians, and so on. I want to talk very briefly about a different type of credibility gap. About a year ago, the federal bureaucracy issued a directive to all its agencies telling them to replace the word "poverty" in all its official documents and releases with "low income." Thus, the administrative genius instantly wiped poverty from the face of the nation.

This kind of use and abuse of words and of the language has led, for instance, to that ultimate abomination of the protective reaction strike. Somewhere along the line in all this we have failed in something. We have taught the words and the manipulation of words, which can be a highly sophisticated skill. But we have not taught respect for words, nor for the meaning behind words. We use words as though they really did not matter; they all become, in a sense, campaign promises to be disowned and forgotten at will. We worry briefly about critical slogans which tell us that we have failed altogether. But just as quickly we succumb to a few clever verbal manipulations that make us feel the problem has been solved.

It is clearly true that we have built the most massive education system in the world in an incredibly short time. At the turn of the century only about 4 percent of the high school age group of Americans graduated from high school, while today about 40 percent of that group go on to college. More than 60 million Americans from kindergarten to graduate school are actively enrolled in some kind of educational institution full time. And yet, today education is everywhere under attack.

The greatest danger to education's future is that perhaps for the first time it is drawing equally cruel fire from three different fronts: the right, the center and the left. The reactionaries have never liked mass education, which seems to them to debase the intellectual currency. And this anti-democratic right is presently being joined by an increasingly conservative middle class that sees its own educational position threatened by too great an upward mobility from below. The re-

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sult is that the right and the middle have joined in a wave of budget cutting with the threat of worse to come.

This threat from the right might be manageable largely because it is not new. The more alarming menace comes from the left. For several years now, there has been a growing chorus of voices which charge that the schools are oppressive; that they and the universities serve only the corporate interests of the state and treat children and students as pawns rather than people; that compulsory education is not, as was once believed, the great social advancer, but an affront to human freedom. The ultimate revolutionary strategy that has emerged from this attack is the demand for the deschooling of America.

Some of us have memories long enough to remember that other political pipe dream which saw the political utopia in a withering away of the state, and we are somewhat suspicious of the promise that education will be saved by a withering away of the school. I have great sympathy with the left wing critics' charge that education at all levels has been intolerably rigid and bureaucratized, and those of us who believe in education must exercise our right and duty to criticize and press for reform. But it seems absurd to talk about reforming the school by abolishing it; it seems naive to suggest that because institutions are rigid, the answer is to do without institutions.

I cite these attacks because they are important to an understanding of education's terrible difficulties. On the one side, for example, there is a strident demand for old-fashioned, autocratic discipline. Recently a special Gallup poll found that discipline, law and order, is a predominating concern of the majority of people who were asked what they thought was important in public education. At the very same time there is a demand for the elimination of all structure and requirements, a kind of uncharted joy ride into a super-Summerhill. While partisans of both extremes argue with each other, there is too little indication that those in positions of power and responsibility are coming to grips with the difficult task of charting a course.

At the height of the now all but forgotten student revolution of a few years ago, I was invited to attend a conference which had been arranged by the radical student leaders of one embattled institution, to which they had asked university administrators and trustees, experts and a few general kibitzers like myself. During one of the sessions, the president of an important university delivered a charming dissertation about the awful problems of the administrator beset by conflicting demands from all directions. And when he finished his description of the campus and sat down, one of the dissident students, one of the group that had considered itself oppressed by the autocracy, stood up and asked in disarming despair – "What I want to know," he said, "is who the hell is in charge?" I am afraid that is still a pertinent question in any discussion of the future of education and particularly in the quest for better teaching.

The years of unrest have given proof to what many of us had long suspected: university faculties are more interested in being left to doing their own thing than

in reforming their institutions. Under the gun of crisis, faculty members tend to bend with the winds of current demands, the quicker to return to their peaceful existence.

Clark Kerr reissued his ten year old book, *The Uses of the University*, with a postscript: "The university has been shocked by many external and internal crises over the past few years, but it is remarkable not how much it has changed, but how little it has changed on so many campuses in those areas that are under faculty control . . . In particular, the professor who pictures himself as a radical for all seasons dislikes public mention of his very real conservatism about the affairs of his own faculty (50)."

At present, it may look as if the faculty has been let off the hook. The students have come down from the barricades; most of them are disillusioned with the leaders of yesterday's revolt, realizing those leaders too had been infected by the virus of the empty slogan, the easy elimination of problems by pledging death to the pigs or similar rhetoric. Most students confronted by the new depression in the job market want to make their education pay off. But I think it would be tragic if we took the present calm as satisfaction. If we do, we invite another disaster, and it really matters very little if it is to be another round of violence or a disillusioned tuning out.

If we want to make teaching meaningful again, we must first ask ourselves what has gone wrong in the aftermath of the last upheaval. We did, after all, promise change and reform. I do not want to suggest there have not been some improvements in many places. But, judging by the stories, releases and reports that reach my desk, what has been the prevailing course of reform is to drop requirements. I suggest that merely getting out of the students' way, merely handing them a catalog in Sears mail order fashion, is not acceptable reform. Neither is the establishment of free universities where people teach and learn only what strikes them as interesting at the moment.

It seems to me that if we take seriously the mission of higher education, the faculty will have to do some intellectual soul searching and make some hard decisions about the meaning of education to the young men and women who come in search of wisdom and the capacity to order their lives and their priorities. They seek competence in a variety of subjects and skills, of course, in addition to a sense of purpose and direction. But it is in this area of more general understanding that we have failed most seriously, because we no longer have confidence in our ability to deal with a common core of knowledge.

Our graduate schools, where our college teachers are trained, discourage educational synthesis. The academic generalists become almost as disreputable as newspapermen. Yet a core of general education is even more necessary in this post-industrial age with its intellectual fragmentation than it was before. The creation of a principal cohesion is even more crucial during this time of political divisiveness.

If our young people are to find their way in this baffling and often oppressive world of crowded cities, vast corporations and unions, and inevitably more power-

ful government machinery; if our young people are to be able to cut through the slogans and the commercials and the manipulation of words; if they are to recapture and keep alive something of the American dream and the meaning of liberty and justice, then more is needed than a college catalog and the attainment of the required number of credits.

In 1948, Amherst College initiated a new curriculum which at that time was considered a major breakthrough. It was talked about all over the country. Central to its program was a course in the problems of American democracy. The issues to be studied in that course, ranging from war to inflation, from the gold standard to justice, were selected each year by the faculty. Amherst's teachers prepared the textbooks, the source materials to be studied, and the books which were subsequently published as paperbacks, still available today, still readable and useful. All disciplines cooperated in the problems courses – outside experts, statesmen, economists, artists, and others were invited to lecture on the problem under study and to meet with students in seminars for several days afterward. The point is that the entire college, all students and teachers, took part in this unifying exercise.

For a while it electrified the campus. It did for the college what higher education ought to do for the country: provide a sense of cohesion – not uniformity, not standardization, not consensus, but some basis for common discussion of the issues and principles that confront our civilization. Without such cohesion, the social contract disintegrates as we are seeing it disintegrate today.

The central idea of the Amherst program was to teach students to consider the consequences of their actions. What could be more basic? One wonders what would have happened to the planning of our national policies if more of our leaders, and more of the intellectuals who provided our leaders with important scenarios, had been schooled, ahead of skills, in the art, almost the religion, of considering the consequences. Fifty thousand Americans might not have died.

Perhaps the time has come to rediscover some of the obsolete reforms of yesterday. The problems of American democracy have never been more acute than right now. The nation is fragmented. Special interest groups are pursuing their own limited goals. Governmental and corporate power grows. Privacy is diminished. An oppressive un-American concept of law and order pushes toward the center from the right, a mindless egalitarianism crowds in from the left. The public relations myth creates the impression that the image-makers can eliminate poverty by removing the word from government reports and replacing it with "low income." The faculty, unsure of its own goals and fearful of the students' demand for relevance, shows little appetite to join with students in rebuilding an academic center that will hold.

While there are today, as before, some teachers prepared to do this job, I doubt that there are enough who have the breadth of view and who are willing to stray from the departmental reservation. Since there were not enough such teachers in the 1940's and 1950's, it is safe to assume that after the enormous

expansion of higher education there are, relatively speaking, even fewer today.

But we do have today new means of solving an old problem. The technology offers us an opportunity to multiply almost indefinitely the impact of the best among the relatively few great and compelling generalists for the creation and enrichment of the general education core.

Recently, I have had an opportunity to observe first hand the technique and impact of Britain's new Open University. There, the faculty is dedicated to using technology for the purpose of making available the best, most carefully considered teaching in any area to produce weekly television and radio programs specifically for that purpose. I visited students, many of whom had not finished high school, who are enrolled in that enterprise. I went to the home of a student who, in the past, would have had as much opportunity to get near a British university as an inmate of a prison. But now, the means that are placed at his disposal by this new technology have literally changed his life, not his learning capacity, but the books he read, the music he listened to.

While the goals and needs of the United Kingdom are radically different from ours, the technique is clearly applicable to the American search for a common core. Children have been finding that it can be done much more readily than university students. A child from New York can converse instantly with a child from California about the Cookie Monster on Sesame Street; he has developed, on a low level, a common core with his entire age group throughout the country. The technology is there; it can be done. If it can tell five year olds about the Cookie Monster, it can talk to older people about, for instance, the meaning of liberty.

The effort that needs to be made calls for the training of a new nucleus of teachers who, in turn, can impart a new cohesion to a generation of students. Instead of continuing on the current course that shuttles between explosive alienation and demoralizing apathy, we could once again build a philosophical, ethical, and political foundation of thought, spirit, and action.

So far I have not specifically mentioned some of the mundane problems of basic teaching, starting with reading in the elementary schools. Some 15 million school children have reading deficiencies; more than 18 million adults cannot read such simple instructions as simplified application forms for driver's licenses and welfare eligibility forms. It is fruitless to talk about the future of teaching at the universities without first showing concern for the future of teaching everywhere, beginning in nursery school.

Dr. Hans Rosenhaupt, the Director of the Woodrow Wilson National Fellowship Foundation, writes in a recent report (70):

> In our search for excellence, let us remember that education is a seamless garment. Good teachers are needed in kindergarten, in elementary and high school, in our colleges, and in our graduate and professional schools. An important step in making teaching careers attractive will be the tearing down of barriers between the several levels of education.

I would go a step farther. The issue is not merely how to make teaching careers more attractive. The issue is how to provide the schools and colleges with teaching that works.

Evidence is unhappily conclusive that much of what we teach our elementary and high school teachers in college leads to dismal failure in the classrooms. Reading is probably the most obvious case in point. Whatever disagreements there may be in methodology, the fact stands out that the majority of new teachers enter the classrooms with only the vaguest idea of how to teach children to read, and virtually none of these new teachers knows how to react to the needs of the great variety of children they are asked to teach. At the same time, nothing persuades me that well-trained, skilled teachers cannot teach most children how to read. The situation in mathematics is no better and maybe slightly worse, the only difference being that people do not get as worked up with failure in mathematics as with failure in reading.

All the indications are that there continues to be an unbridged gap between what future teachers are taught in college and graduate schools, and what is demanded of them in actual classrooms. There seems to be no remedy in sight until teacher preparation is transferred into those classrooms. But while there have been occasional moves in this direction, very little has happened. And it is, if it is not the only way, then certainly the only way that has not been systematically tried.

The time for theorizing about what is wrong with the present state of public school instruction is long past. So is the time for higher education task forces on the problems of inner city education. The problems are in the schools, and it is in the schools that they have to be solved. It is in the classrooms, too, that the new prophets of de-schooling and the doomsayers of the public schools will have to be answered – not through defensive statements, but by proving the critics wrong.

If a new wave of critics tells us that education has failed to lead to the open road of success, we should ask them, "Failed in comparison to what?" To Utopia? Or in comparison with Argentina, or Great Britain, or Germany, or Russia? Without such comparisons, references to the relatively more restrictive or less upwardly mobile societies which lacked the lever of mass education, the charges of failure are all but meaningless no matter how many computers are used to arrive at the conclusion.

But it is also clear that we cannot rest on the accomplishments of the past. The de-schoolers are right if they say that education today no longer responds to new expectations and new dangers. The answer to the de-schooling call, therefore, must be a readiness to re-school – a readiness to fight anew battles which were only temporarily won.

Today it seems devastatingly clear that popular support has drained away from education. Much of the radical intellectual opinion has raised questions about education's legitimacy and success. These views may be the ideological expressions of

a political assault on the establishment, because education is thought by critics to be the establishment's creature, but, whatever the motive, the effect has been an erosion of education's base of support.

As a result, our schools and colleges face the future more alone than at any time in recent history. Population statistics and economic facts of life dictate that we might as well forget about expansion in the next 10 to 15 years. But if disaster is to be avoided, the educational leadership must do more than merely hold on to old grounds. A national spirit has to be recreated.

From the beginning of the American education enterprise, the schools and colleges have been an integral part of a nation-building adventure and have shown the way to the world's best hope for the creation of a free society. Now the challenge to the schools and colleges is to rebuild a nation that shares worthwhile goals, to lift the people's spirit, and to reaffirm and justify faith in those freedoms which will determine where we are going.

We must seek out those small groups of available people on each campus who are truly excited by this challenge, and who will take advantage of the new technology now at our disposal to establish and continue a common inquiry. I would warn that such efforts probably cannot be institutionalized, but neither should they be abdicated. Hopefully, as these efforts bear fruit, more and more people will be able to continue the inquiry individually. I firmly believe that for our country and our children's sake, this is education's last and best chance.

COMMENTS

The convocation audience had the opportunity to ask Mr. Hechinger a few questions in reaction to his ideas of what is needed in higher education. Of concern was why faculty and educational leadership apparently are not able to bring about reform in higher education. Hechinger emphasized that attitude was a key ingredient to bringing about effective changes in instruction and in higher educational institutions. Until faculty are committed to changing instructional patterns and priorities with regard to teaching, there may be little hope. The use of leadership with positive attitudes toward teaching is viewed as education's last and best chance. This leadership exists, but unfortunately these individuals usually find it difficult to make an impact upon educational decision-makers.

The use of technology as the force to bring about cohesion in education is readily challengeable. The past is littered with the ineffective results of utilization of technology. Is the structure of higher education conducive to undertaking the utilization of technology as envisioned by Hechinger? Perhaps the medium is really not the question, but those individuals who use technology. The apparent built-in bias toward technology by higher education professors does not suggest this as a realistic avenue for bringing about reform and innovation. Mr. Keppel in his presentation as a spokesman for private enterprise was not optimistic that technology would forge the new path of reform, especially as urged by private enterprise, unless educators choose this method of improving instruction.

Educators are often unwilling to accept the reality of the concept of public accountability implied in the presentation, paper, and discussion. The loss of confidence in professional education is difficult for the professoriate to understand, something that administrators realize through daily contact with the public. This apparent pessimistic view must be considered realistic in light of the actions and activities of the past few years. However, Conference participants in their optimism feel that educators can restore this confidence of public citizens in institutions of higher education if educators are willing to take the responsibility and chart a new course. In a growing period of public cries for accountability, will institutions of higher learning rise to the challenge of reform?

IX. MAJOR FACTORS AFFECTING INSTRUCTION IN HIGHER EDUCATION

*Dr. Steven T. Holbrook**

The decade of the 60's has been labeled a period of general unrest in higher education throughout the United States, beginning as early as the Berkeley demonstrations and paralleling societal upheavals brought about through political action, inaction and social change. The effect upon higher education was often one of upsetting the status quo within colleges and universities. Many traditional activities and procedures were questioned, first by the students and then by professors, administrators, trustees, and the public. One of the major problems arising from this general unrest concerned the major mission of higher education – instruction – the transmission of knowledge, the development of attitudes, the provision of skills, and the stimulation of curiosity as these relate to the individual engaged in a program for intellectual development and career preparation. Out of it came the realization that the state of instruction was far from excellent; in fact, in most cases it was very poor.** In a study of the state of the art of teaching, the Danforth Foundation noted in its "News and Notes" (28):

> Yet even before the Berkeley alarm of 1964, there have been unmistakable signs that teaching in American colleges and universities is *not* uniformly good, or even uniformly acceptable. Undergraduate and graduate students have been scathing in general and in specific criticisms of professors and of curricula, for baccalaureate and for graduate degrees.

Along with the realization of the poor quality of instruction at the higher education level came the realization of other major problems, especially the bleak financial picture facing higher education at the close of the 60's. Accountability became a household word for the 70's. For a long period students agitated for instructional accountability, the concept of requiring professors to be responsible for the delivery of instruction. The public soon joined students in this cry and

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**In discussing the quality of teaching, it is not the intention of the author to discount the large number of dedicated teachers who are successfully providing good instruction.

things began to move when legislators, the guardians of the public purse strings, began to point to the failure of higher educational institutions to provide quality instruction. The initial reaction of colleges and universities, professional organizations, and individual professors might have been nervousness, but attention began to be directed toward the improvement of instruction. The decade of the 70's began with an introspection by the institutions of higher education and an awareness of the need to examine closely what was being accomplished so that evidence would demonstrate that the goals and purposes of higher education, including instruction, were being effectively achieved. As a result of this national focus on accountability, the 70's have become an excellent time for improving the state of the art of teaching.

It is difficult to look at instruction and point out the particular factors that exert a constraining influence upon the improvement of instruction without a brief overall glance at the evolution of higher education in the United States. After all, instruction has not always received the heavy criticism that presently occurs. The liberal arts institutions have traditionally been recognized for excellence of instruction. However, as higher education developed in the twentieth century, this liberal arts tradition inherited from the British system of higher education, became overshadowed by the German influence with accent placed upon scientific research. This German research influence, solidly grounded at the graduate level of training, soon made its way into the undergraduate curriculum. The result was an introduction of multiple factors that heavily influenced the quality of instruction. The addition of American-developed land grant emphasis and the evolution of the two-year institution with its community emphasis helped to contribute to an increasing complexity of higher education goals and purposes.

This brief historical sketch of the development of higher education serves as background for an investigation of those factors that impinge upon the improvement of instruction and a discussion of the implication of these constraints as higher education seeks solutions to the instructional dilemma. Through extensive analysis one could historically pinpoint the origin of these factors, but such an analysis serves little value. Of more importance is the isolation of factors that relate to instruction and an analysis of which ones to consider changing to bring about desirable and beneficial improvement in the quality of instruction. By briefly surveying the profuse literature on higher education, it is evident that the subject of instruction receives wide attention. However, it is difficult to find selections that directly point to the factors that broadly influence the quality of instruction. For the purpose of this paper 14 factors suggested by people writing about higher education have been selected for discussion as major themes affecting the quality of instruction. While some of these influences are broad in concept, others are more specific. They all, however, are important to consider as possible areas that could be studied, and with resultant programs could produce some changes in the quality of instruction now being offered at institutions of higher education.

One major area concerns graduate preparation, especially for the role as a professor in a college or university. It is clear that *present graduate preparation programs pay little or no attention to teaching or preparation for teaching.* It is ironic that American universities have willingly accepted the responsibility of preparing candidates for other professions such as law, medicine, and the church, but the university and its professoriate have ridiculed the notion of "minimal quality control in university teaching (28)." Students proceed through graduate preparation programs, evidently to come out as professors, with no attention to instructional approaches and curricula. This is partly based upon a tradition in American higher education that college and university teachers learn to teach by doing. It falls under the maxim "good teachers are born, not made." The Assembly on University Goals and Governance stated the problem quite well: "Too many academics presently enter the profession in a disgruntled state, angry over what they conceive to be the inadequacies of their graduate education (3)." They suggest that apprenticeship programs for college and university teachers with guidance and supervision provided by experienced teachers be available for graduate students who intend to become professors. While some teachers provide such learning opportunities in some institutions, these practices need to be extended. They conclude that most graduate students are enrolled in advanced degree programs directed toward professional rather than professorial careers (3).

An examination of the lack of adequate preparation for teaching in graduate education programs logically leads to *an appraisal of the degree system,* another factor influencing instruction. Because of the research tradition in American education and the failure of the doctorate of education to have any influence on the supremacy of the Ph.D., frequent comments are being offered suggesting changes in the degree system that would be more sympathetic toward instruction. "The Ph.D. degree is today the required license for teaching in most American colleges and universities in arts and sciences faculties and in certain professional schools (3)." This degree's near monopoly is now being challenged. The Carnegie Commission on Higher Education in its study *Less Time, More Options* supports the development of the Doctor of Arts degree for those individuals interested in teaching at the higher education level. They assert that the Ph.D. is useful for advanced research work and for training students to undertake research, but that it is less useful for persons who will teach but not do research or train researchers. The D.A. degree for the non-research teacher would call for (a) a broader field of basic knowledge than the more specialized Ph.D. degree, and (b) an opportunity to study and practice pedagogic technique. This D.A. program would be a specially designed course that would lead to the standard degree for college teachers (18). The Carnegie Commission suggests that the development of the D.A. will make the preparation of teachers, as teachers, the concern of all departments and not just schools of education, something the Ed.D. was unable to accomplish. As a result, teaching would achieve greater prominence in the arena of higher education and the narrower specialization of the past century would not dominate so much of higher education.

A third area of concern that affects instruction is the broad concept of *institutional management*. The 60's directed attention to the fact that higher education institutions were doing a poor job of utilizing resources and coordinating the operations of the institution. The apparent problem with regard to instruction concerns the tendency of institutions to become overly bureaucratic and less flexible. Kenneth Eble, who was intensively involved in a special program on the improvement of instruction, reported in the *Chronicle of Higher Education* about a conference on instruction (34):

> There was marked impatience by all participants with the bureaucratic aspects of college and university functioning. Such statistical, production-oriented measures as teaching load and credit hours were strongly criticized. Despite an over-abundance of managerial policies and practices, the diversity of talents, skills and competence found within a college faculty is still only partially recognized and rewarded.

It is obvious in the cry for accountability that more effective management of higher education institutions will ultimately affect the instructional component. Changes in governance are inextricably connected to management. For example, proliferation of departments and schools each largely autonomous affects the quality of instruction. More effective management resulting in greater coordination of these departments would result in greater stimulation across discipline lines and cooperation among professors from different professions. The student would greatly benefit from the improved instruction resulting from a multidisciplinary approach.

A fourth factor that affects instruction to a great extent is the *attitudes of professors*. It is difficult to describe, let alone measure, the effects of faculty attitudes on instruction. The long-standing hostility of professors and departments, especially at the graduate level, to anything that smacks of educational methods still largely exists (18). As long as professors consider instruction the least important of their activities, the opportunity for in-service training involving new approaches and techniques in the instructional process will have little benefit. Also, the inattention to teaching at the higher education level has resulted in the recruitment and preparation of those individuals not inclined toward teaching as a career. These attitudes have been instrumental in the refusal to examine learning from fresh perspectives. Experimentation in learning approaches has often been stifled by professors whose attitudes mitigate against instructional improvement. In rare cases, professors, individually or collectively as faculties, exert influence on their colleagues for purposes of instructional improvement.

Closely associated with faculty attitudes and supportive of these attitudes is a fifth factor – *research*. "The argument has been frequently made that research interests divert professors from their teaching obligations, thereby leading to a neglect of students. This may indeed happen (3)." The participants of Professor Eble's conference believed that the emphasis upon research was often at odds with teaching. They cited: "At the point of getting a job, keeping it, or advanc-

ing through the ranks, doing specialized scholarly work safely within a discipline was a more promising path than giving first priority to teaching (18)." The Carnegie Commission stated it very succinctly: "We now select and train a student to do research; then employ him to teach; and then promote him on the basis of his research. This both confuses him and subverts the teaching process (18)." While the Newman Report also points to the accent on training researchers rather than training practitioners, it cites the current oversupply of Ph.D.'s as a factor in forcing a reappraisal of goals, with a subsequent critical look at instruction (66). The Assembly on University Goals and Governance suggests that policies not be adopted that will destroy the vital links between research, exploration, and imaginative teaching. They argue that any attempt to develop a teaching ethic in higher education that would banish research would risk making teaching sterile. Instead, research that improves the learning process and is linked to teaching and intellectual efforts is most appropriate for universities. However, they caution against universities extending themselves by serving as holding companies for large laboratories or research projects that are not linked to their educational programs (3).

The association of research to the concept of a *reward system* is a real one and serves as a sixth factor impinging upon the improvement of instruction. Most university reward systems, at present, tend to prize scholarship and research while they skim lightly over teaching ability, and administrators rather than professors carry a primary responsibility for conveying the institution's signals on teaching (28). Therefore, the reward system plays a crucial role in the way college professors commit their intelligence and energies (34), and instruction will suffer as long as it remains at the bottom of the list of rewards.

A more specific, yet important, factor (the seventh) that affects instruction is the *utilization of a professor's time* and the demands placed upon him by the institution and society. Robert Silverman writing in the *Journal of Higher Education* stated (76):

> The enhanced demand for the professor's services outside the university has often resulted in the enhancement of his stature within the institution. It has also resulted in the neglect of teaching responsibilities by some and the delegation of much teaching to younger and less experienced instructors – one of the factors responsible for student unrest.

It has often been pointed out that in major universities the responsibility for delivering undergraduate instruction often remains with graduate teaching assistants. The esteemed professors are too busy researching, writing, and consulting. This is closely tied to the reward system as those professors neglecting instruction are being rewarded for pursuing activities which take up the time they could utilize for improving instruction.

An eighth concern connected to faculty attitudes, utilization of time, research, and the reward system, is *tenure*. Tenure with its assurance of continued employ-

ment permits the professor to undertake activities that are of utmost interest to him. Tenure may or may not involve interests, however, which correlate highly with the mission of a teaching institution. At present, institutions have little resource for getting rid of tenured professors. In his State of the State message in January, 1971, the Governor of California advocated the abolition of faculty tenure (76):

> The original and legitimate reasons for tenure no longer exist. Tenure has become a haven for the incompetent teacher. It should be altered to include a system of merit pay which provides real incentives for quality teaching. This should not be precipitous; a judicious, sensible phaseout would be a real service to all concerned – the student, the public and the teaching profession.

While tenure may result in harboring some professors who ignore their instructional responsibilities, the real question is whether the abolition of tenure will directly result in the improvement of instruction.

One of the time-worn issues involving instruction concerns *confusion over the content of teaching* (ninth factor). Some critics suggest that it is not that instruction has been downgraded but simply that we are uncertain what knowledge is crucial, how it should be organized, and how teaching can be made effective and excite the learner. Professors throughout the university as well as in schools of education have difficulty in reaching agreement as to what teaching constitutes. Traditionally, professors outside of professional education have largely ignored pedagogy and have concerned themselves with the content of their disciplines. The more pronounced position in professional education is to view teaching as an applied science, the application of information and the transmittal of knowledge through a sound understanding of learning theory. However, until professors begin to cross disciplines and cooperate with one another, the confusion over the content of teaching will continue. This confusion could be perceptibly reduced through self- and group-exploration of the teaching process.

A tenth factor which also contributes to the confusion over the content of teaching is the *lack of teaching assessment systems.* More systematic appraisal methods need to be introduced to identify and reward successful teachers (3). The Danforth Foundation through a conference on the improvement of instruction found that central themes had to do with the identification of good teaching-learning, for if and when improvement of teaching is the goal, there must first be consensus on definitions and measurements. They felt that evidence of successful teaching must play a more significant part in personnel decisions and academe must devise new ways to evaluate teaching ability (28). Presently, students and faculty at numerous institutions are attempting to devise measurement systems for assessing the quality of instruction. With the help of national organizations such as Educational Testing Service, the problem of lack of instructional assessment techniques could be resolved. An agreement of what constitutes ex-

cellent teaching would be not only advantageous but necessary for the overall improved position of instruction at the higher education level.

An area that needs little discussion regarding its impact on instruction is the *financing of higher education* (eleventh factor). The belt-tightening presently taking place in higher education has both advantageous and disadvantageous aspects. With less money available, the improvement of instruction is likely to suffer since monies for this area come from operational budgets. At the same time, with less money, institutions are less likely to undertake areas of development that reach beyond the traditional emphasis of the university. Consequently, institutions are forced to refrain from overextending themselves. The financial conditions impel radical changes in continuing instruction (14), and this could have a beneficial effect. If, however, these financial conditions result in increased instruction by teaching assistants rather than qualified professors, then the lowering of the quality of instruction will continue (49). There is scant information available that identifies and assesses the amount of money that is or should be directed toward the improvement of instruction. The Newman Report, however, cautions against the tendency in higher education to look at instruction totally within a framework of cost effectiveness. They see it as not only a financial problem but also an intellectual one. "Questions about efficiency lead to a host of questions about teaching and learning and to ultimate questions about the nature and purpose of higher education (66)." The lack of sufficient and valid information on the relationship of costs and instruction is a result of the poor general management of institutions as well as the avoidance of responsibility by individual professors.

Accreditation is an issue in higher education that affects instruction (twelfth factor). It is often stated that archaic standards set by accrediting groups have imposed effective "trade restrictions" on educational practices that make it very difficult for schools to introduce more efficient teaching methods (36). The accrediting process by outside groups, including agencies for teaching standards and associations for specific disciplines, has a powerful influence upon the directions taken by a professor, department, school and university in the development of programs. Unless accrediting agencies begin to recognize the need for diversity of instructional processes, approaches, material and curricula, they can be a disservice to an institution by working against programs which would offer instructional improvement. The Newman Report recommends a revision of the role of accrediting organizations to include (1) a change in the composition of established accrediting organizations adding representatives of the public interest, and (2) a reduction of reliance on these established organizations by federal and state governments in determining eligibility for federal support (66). This is a very complicated problem and it is logical that many institutions, and especially their chief administrators, are opposed to outside efforts to license the operational procedures of their institution.

The thirteenth factor which has been mentioned previously with regard to the increasing attention to instructional accountability is the *influence of legislators and governmental branches.* At the community college level it is apparent that greater control and direction of two-year institutions is being considered by state legislatures. With the unrest of the 60's many prominent political leaders have become disenchanted with the American university system, its professoriate, and the students. As a result, government is exerting greater influence on these institutions by greater concern with, and restrictions on, funding. At the same time, legislators are becoming more sophisticated in their knowledge of and approach to the activities of higher level institutions; for example, some state legislatures are attempting to legislate into law the teaching loads of professors in public institutions. Professor Eble cautions that: "A state legislature's fixing of teaching loads in public institutions may not lead to improved teaching (34)." The point is clear, however, that unless institutions and the professoriate do something to improve the state of instruction, the clamoring of students and the public will force the legislatures to establish guidelines that they feel will result in improved instruction. This type of decision-making by outside groups may be a dangerous precedent for higher education, which traditionally has made its own decisions affecting the quality of instruction.

A final issue (fourteenth factor) which affects the quality of instruction is the recent *trend toward non-traditional education program development.* The accent on external degree programs, universities without walls, independent study, continuing education, and non-degree programs has come about as a result of an increased number of people desiring higher education and enriched learning possibilities. Likewise, non-traditional programs have developed from a clamor for experimentation as a means of avoiding traditional instructional practices. Faculties are reconsidering existing calendars, utilizing classroom settings outside of the institution, and instructional approaches that grant the student a larger responsibility for the learning process (3). While this is an advantage for institutions of higher education because it offers new opportunities for instructional experimentation, an assessment of how this affects the traditional educational program is needed. These non-traditional experiments in instruction are relatively small in terms of the quantity of higher education instructional efforts. Hopefully, they will not serve as an excuse for not dealing with the traditional instructional problems within universities and colleges that affect the majority of students. While non-traditional educational programs are being developed, instructional improvement should also take place in traditional educational programs.

The above-mentioned 14 points do not exhaust the list of factors affecting the quality of instruction; however, they do suggest the complexity of the problem. The question remains: What is being done to improve instruction? According to Professor Eble, whose activities place him in the center of what is going on nationally, signs of instructional improvement are increasing (34):

> There does seem to be more interest in teaching being expressed by students, faculty members, administrators, and the public outside. A look at individual campuses discloses a good many individual efforts to upgrade teaching, and both private and public grants have been made to individual institutions for the specific purpose of improving teaching.

The Newman Commission's *Report on Higher Education* supports the position that changes designed to improve instruction are being initiated. It points to increased responsibility placed on students for their learning and an increase of incentives for faculty members to concentrate on teaching (66). While individual colleges and universities have begun to answer the demands for instructional accountability, programs are isolated and often fragmented. These programs generally focus on experimentation with variations on the traditional school system such as independent study, small group tutorials, and alternatives to the traditional lecture approach. These variations almost always entail extra expense. There is an increased use of audio-visual and technical devices which unfortunately are not often developed on a shared basis between neighboring institutions. Institutions have begun to go outside the college or university for new environmental settings where students can learn by becoming involved. Universities are diligently working toward programs involving students in the research efforts of professors (49).

While efforts are taking place and progress is being made toward the improvement of instruction, the Assembly on University Goals and Governance pointed to a lack of articulation and communication among institutions of higher education regarding educational experiments. They felt educational experiments often take place on a single campus, are rarely studied or evaluated by other colleges and universities, and reflect a lack of inter-institutional cooperation. In their judgment, a greater accent on shared services by institutions of higher education would be a welcomed approach for educational experimentation (49). Another approach used by institutions of higher education for examining instruction has been the development of centers and institutes. In most places a (28):

> . . . center meant not a single place but a battery of resources coordinated by one person and scattered across the campus: TV equipment for monitoring classroom performance; program support for developing Programmed Self-Instruction courses; a clinic for discussing teaching efforts; a staff to provide model demonstrations of a variety of techniques such as simulation and gaming. Overall, the word "center" symbolized a shorthand way of expressing the institutionalization of new means to encourage faculty to learn about teaching, to be concerned about teaching, and to entertain new ideas about teaching.

Some universities have suggested getting rid of the system of filling university teaching positions by word of mouth and instead have encouraged the develop-

ment of a national placement system (49). Professor Eble has suggested that institutions do the following three activities for the improvement of instruction (34):

> There should be a visible comprehensive program to assist the personal and professional development of faculty members. There should be provision for faculty members to obtain useful feedback from students concerning their teaching activities. There should be periodic reviews of the instructional program and proposals for its improvement.

How many universities and colleges actually take these suggestions into consideration?

X. CONCLUSION AND SUMMARY OF GENERAL DISCUSSIONS

Evaluation is a mechanism of measurement used throughout the educational community to achieve a multitude of objectives; however, as an ultimately subjective device, it is often objected to by those who have a commitment to what is being measured. Discussions carried on among conference participants focused on the dual nature of the evaluative process, and concluded that evaluation is a tangible starting point to talk about improving the interaction between teaching and learning. The following is a summary of issues raised during the course of these discussions.

1. Student evaluations can provide feedback useful to the teacher in assessing the effectiveness of his techniques in reaching course objectives. For example, perhaps the single most influential force responsible for changes in style of teaching in higher education has been the student's desire for something better. In one sense, student evaluations do not determine the absolute truth about all teaching variables, but, properly used, simply add to what we can know.

2. Information about what makes a creative teacher/scholar indicates that a combination of good teaching and research is recognizable by both students and colleagues, but evidence remains ambiguous as to what traits of the scholar's personality are responsible for his or her effectiveness. Until recently, the knowledge, enthusiasm and influence of recognized scholars has not been sufficiently utilized to contribute to our information on improving the instructional process.

3. Faculty are naturally interested in teaching well, but some have a fear of being evaluated by students on the basis of their teaching. This is in part the result of a socialization process at the graduate level where primary value is placed on research and scholarship efforts. An understanding of the complex relationship between what a teacher does in the classroom and its effect on a student's development needs to be studied more systematically.

4. The results of evaluation techniques now in use in higher education strongly suggest that information feedback on teaching has a positive effect on the improvement of teaching. Much is happening with the use of video-taping, or micro-teaching, which aids in the self-analysis of a teacher's classroom effectiveness. One example is the Clinic to Improve University Teaching at the University of Massachusetts. These and other projects indicate that faculty in general are becoming increasingly receptive to open discussion of their individual teaching problems and more aware of the need to educate themselves in this area.

5. Neither the assignment of grades to a student, nor the recognition of lack of enthusiasm in an instructor will improve instructional interaction. Very little is known about the evaluation of student performance and very little about learning. We do know that the teacher is often the learner in the educational process, and that evaluation serves to derive information over a period of time which can be used to develop strategies of learning to improve performance.

6. Departmental chairmen and other members of a university's administration can effectively use student evaluations to improve teaching. Administrative awareness of faculty members who are consistently nominated by students as "problem teachers" is essential for the determination of methods and strategies which will result in more efficient and effective utilization of faculty skills.

7. Evaluation efforts, and the use of evaluative information for promotion and salary determinations are basically in conflict with the use of evaluation information for faculty development. The use of evaluation data for promotion or tenure diverts attention away from information which might be useful to the individual in improving his teaching effectiveness. The continuing education of the teacher requires that he be aware of the products of his efforts without the fear that such information will be used improperly against him. In addition, when an evaluating system is being used on a campus, it often has a circulation which potentially can increase uneasiness about how the information will be used. In the interests of individual freedom and the resultant development of good teachers, evaluative information should therefore be used openly and wisely for the determination of individual educational productiveness.

8. Responsible evaluation depends on a balance between objectivity and sensitivity, based on the realization that data which seek to illuminate growth in any area are very subtle in their implications. The object becomes not to manufacture easily accumulated data, but to place evaluative information within a broadly conceived structure in which results and influences are measured over a meaningful period of time.

9. Conference participants emphasized during the course of their discussions that the academic community is far better prepared to carry out the productive examination of teaching than are external agencies. Faculty competence in the many disciplines of a university can contribute much to the development of assessment data which reflect the special demands of these disciplines. However, to prevent merely self-protecting or advocative evaluative programs, responsible and enlightened leadership must attempt to direct such studies toward outcomes which reflect the goals of the total university community.

10. The 1972 Education Amendments aggravate problems discussed in this Conference on improving teaching because higher education will now be open to a more heterogeneous student body than ever before. Further, government support of programs designed to reach these students, particularly the culturally disadvantaged, will be sought by a larger number of qualifying schools than ever before. Care must be taken not to attempt to secure such support at the cost of sacrificing institutional autonomy. At the same time, the implementation and evaluation of good teaching procedures must take these new students into account.

11. Participants in the Conference concluded that there is enough time to prepare for implications of the 1972 Education Act, and that, indeed, this is the time for members of the academic community, individually and as a whole, to take

responsibility for the improvement of teaching, and thus for the future of American education.

What Have We Learned?

The following points represent the major ideas reflected through Conference proceedings:

1. Teaching in institutions of higher education is in need of reform.
2. Innovations in instruction are taking place on American campuses; the atmosphere of academic reform of teaching is apparent.
3. Institutional commitment and administrative support are essential for bringing about reform in teaching.
4. The Center for the Teaching Professions at Northwestern is viewed as one model for a university as it attempts to marshall its resources for instructional improvement.
5. Innovations and reform in the instructional process should remain in the forefront of discussion by all educators. Teaching must be examined and talked about more.
6. Philanthropy is strongly committed to assisting institutions of higher education in the improvement of teaching. This excellent resource should continue to be tapped as innovations and new programs are developed.
7. Teaching is not taken seriously, as reflected in the attitudes of professionals, the reward system, and the inadequacy of teaching assessment in higher education.
8. Graduate schools have neglected to assert leadership in preparing doctoral students for competency as teachers.
9. Assessment of teaching is presently inadequate, but recent attempts, especially those built upon student evaluation, are a basis for development of suitable assessment procedures. Of importance is the need for establishing a more direct connection between teaching and learning as it relates to evaluation.
10. Teaching and research are complementary. The question is one of strengthening teaching, not of lessening the importance of research.
11. A National Center for Teaching was suggested as a mechanism for providing educators with more information about teaching innovations and reforms and for providing continuity in instructional development.
12. There is sufficient information as to agreement about what constitutes good teaching, but insufficient information on how to bring about change.
13. While a few professional associations and organizations have sponsored the cause of teaching, generally most have been lax in urging their members to channel their interests toward instructional innovation.
14. The reward system is instrumental in shaping faculty attitudes toward teaching, an attitude often reflecting hostility toward instruction.

15. The financial picture in higher education is not conducive to supporting educational innovation. Outside agencies, private and governmental, should be encouraged to provide funds for development in this area.
16. Private enterprise will become increasingly involved in the affairs of higher education, especially with regard to management and instructional accountability.
17. The public and the governmental bodies are more concerned now about teaching productivity. Presently higher education is not viewed favorably by the public or by legislators.
18. The 1972 Amendments to the Higher Education Act include provisions, which, if ignored by the leadership in higher education, will result in greater governmental control.
19. Private enterprise is competing with institutions of higher learning for preparation of professionals in technical and some professional fields. These programs and those of proprietary schools represent more efficient and lower cost models of centers for training.
20. The move toward new management models will likely view instruction in terms of cost effectiveness.
21. A national assessment of higher education is considered a necessary means of determining what has to be done and who should do it.
22. The process of professional accreditation is seen as a positive force for improving teaching if institutions are forced to undertake self-assessments with criteria directly related to instructional innovation and reform.
23. The federal government in its support pattern now acknowledges all post-secondary institutions including approximately 9,000 proprietary schools. This has profound effect upon traditional higher education institutions as they compete for a share of federal monies. With regard to instruction, greater diversity of students increases demands for instructional innovation and reform.
24. The federal and state governments are likely to impose the greatest force for change in institutions of higher learning. Educators fear control by these external governmental units.
25. Post-secondary institutions do not present a united front or possess an adopted plan of cooperation and action in the face of impending external controls over matters relating directly to teaching.
26. A need for cohesion in higher education exists. This need is a basis for common discussion of issues and principles that broadly affect our society. Academic generalists are needed to harness present technological capability to the task of reviving learning and quality in teaching.

Where Do We Go from Here?

The Symposium on Improving Teaching in Higher Education represented a forum for discussing major issues and ideas relating to instructional reform and

innovation. The framework for discussion was flexible and the content of study was so broad that a conference could logically consume its time with only one problem or with examining one perspective from which higher education and teaching is viewed. While a number of specific suggestions were offered, one major overriding point concerned the need for mechanisms to provide access for continued debate of instructional issues and for experimentation with instructional change and reform.

The responsibility for the improvement of teaching was felt to lie within the domain of institutions. It is in centers of learning where the problem of poor teaching must be remedied. Centers, clinics, enlightened individuals, and programs must be utilized, explored, and developed to provide institutions with an effective mechanism for bringing about necessary changes. Within these carefully designed arenas for interaction, reform and innovation can be initiated and supported properly by faculty, encouraged to grow by administrative leadership, and periodically financed by outside funding agencies. If these contingencies exist, then efforts to improve teaching and curriculum in higher education can thrive and bloom into widespread institutional reform both within and among centers of learning.

Higher education with all its problems retains a flexibility which makes change possible. The opportunities for change with regard to improvement of teaching are greater at present than in previous years. Hopefully educators will rise to the challenge for change in the quality of teaching and take advantage of the flexibility which higher education offers. The astute analyst of American higher education would question how long this adaptability to change will continue to exist. Actions as well as words must become part of the strategy for instructional renewal in colleges and universities.

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